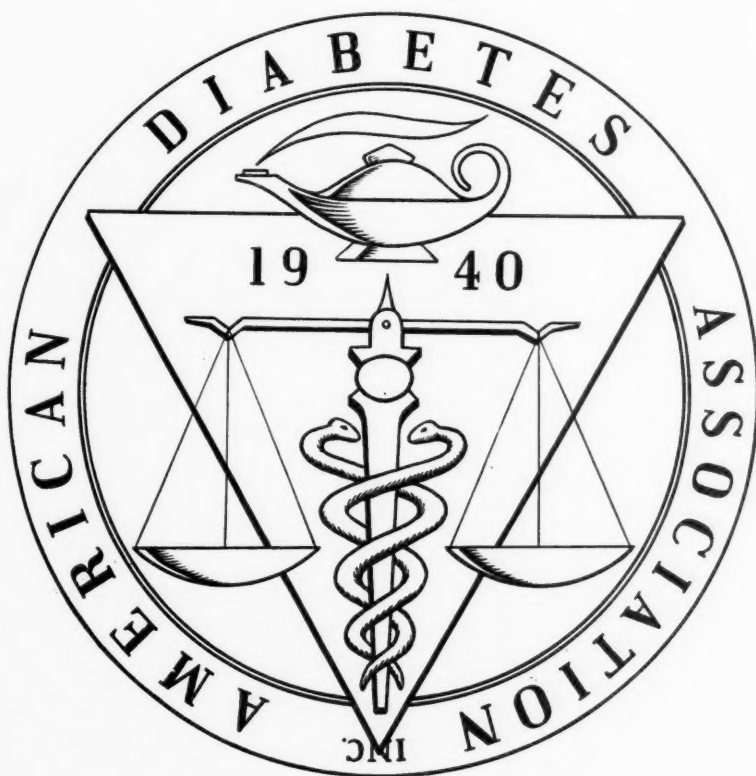


DIABETES

The Journal of the American Diabetes Association

INDEX

BY SUBJECT AND AUTHOR

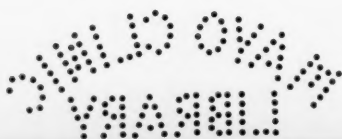


VOLUME 7

1958

107340

Copyright 1959, by American Diabetes Association, Inc.



SUBJECT INDEX 1958

This index covers all reading matter in Volume 7 of **DIABETES**. Entries marked with an asterisk (*) indicate material which appeared in the **ABSTRACTS** only. The author index appears on page 15.

A

ABORTIONS

- and diabetes in male, 33-35
- female sex hormonal therapy, 494

ACETATE

- in glucose formation, *78
- in oxygen uptake, after insulin, 217

ACETOACETATE

- alloxan diabetes induction, *509
- decarboxylation of, 191
- precursors, 173

ACETONE BODIES. *See* Ketone bodies

ACETYSALICYLIC ACID, *508

ACID. *See* specific acid

ACIDOSIS, diabetic

- See also* Ketoacidosis
- adrenal cortex activity, 12, *78
- alloxan, *421
- and biguanide, 92, 473
- blood sugar, 435
- and cataracts, 23
- chloride deficiency, 230-235
- fatty acids, 189, 194-195
- and fetal loss, 441
- and glucagon, *503
- glucose inhibition, in vitro, *510
- and insulin, 230-234, 434-435, 470, *505
- antagonist, *77-78, 230, 434, 437
- in juvenile diabetes, *502
- management, *75-76, 230-234, *333, *504-505
- artificial kidney, *331
- mortality decline, 109-112
- and perinatal loss, 441-442
- and peripheral vasomotor collapse, 234
- and plasma 17-hydroxycorticosteroid level, *78
- prevention, *71, 441, *505
- and renal failure, *74
- serum, 194-195, 235, *334, 434, 437
- and surgery, *160-161
- and tolbutamide, 55
- and urinary output of 11-oxyteroids, 410

ACROMEGALY, 410, *423, 436

ACTH. *See* Adrenocorticotrophic hormone

ADDISON'S DISEASE, 60, *252, 454

ADENOMA

- adrenocortical, 214
- pancreatic islet, *250

ADRENAL GLANDS

- adenoma, 105, 214
- in elderly, *71
- and amyldiguanide, 89

- cortex, 116-117, 410, 435
- in acidosis, 12, *78
- in bronchial carcinoma and diabetes, *76

- after corticotropin, *160
- hormones, 9-14, *76, 435
- in infant of diabetic mother, *74
- in insulin coma, *337
- and lipogenesis, 216
- in nephropathy, 9-14
- in pancreatectomized-hypophysectomized baboon, *504
- in retinopathy, 9-14, *74
- and tolbutamide, *160, *250
- in vacuolization of cells, *509-510
- and vascular lesions, 9-14
- and dehydroascorbic acid, *163

hyperplasia, *74

hypertrophy, 216

and hypoglycemia, 147

after insulin, 435

in toad, *509-510

and intercapillary glomerulosclerosis, *74

medulla, 116-117, 410

and dimercaprol, *423

metabolic changes with stress, 410

in necrotizing papillitis, 116-117

ADRENALECTOMY

and blood sugar, *419, *422

after hypoglycemic agents, 5-7, 54

in retinopathy prevention, 12-14, *422

in vascular disease, *255

ADRENALIN. *See* Epinephrine

ADRENOCORTICOTROPHIC HORMONE

in alloxan diabetes, *162-163

and biguanides, *500

diabetogenic action, *251, 347-348, 410

and hyperglycemia, *163, 347, *417

and phosphatase, of white cells, 454

and retinopathy, *336

and urinary ketosteroids, 11, 12

and vitamin B₁₂ binding, muscles, *417

AGAMMAGLOBULINEMIA, *252

AGE

and albuminuria, *76

arteriosclerosis, 101, *500

and atherosclerotic gangrene of extremities, *70-71

and blood sugar, *78, 377-378

blood urea nitrogen, and insulin, 382

and carbutamide results, *73-74

and diabetes. *See* Diabetes mellitus,

childhood; elderly; juvenile

and glucose tolerance, *70, 350-354

in uremia, 377-379

and hypertension, *76, 101, 441-442, *500

and insulin antibodies, 465

and ketonuria, *419

maternal, and pregnancy outcome,

440-442

menarchial, 29-31

and myocardial infarction, 101

and nephropathy, *165

and neuropathy, 51

and obesity, *75, 215

and pancreas, 56

alpha/beta cell ratio, *163

and serum protein patterns, 48, 50

and sulfonylureas, 54, *249, *255

and tolbutamide therapy, *75, *77, *334

AGRANULOCYTOSIS, and carbutamide,

55

ALBUMIN, serum content, 48, 50

specific insulin-like activity, 365-367

and sulfonamides, 56

and sulfonylureas, *75

and vascular complications, 46-51

ALBUMINURIA

and age, *76

in pregnancy management, 440

pseudo and actual, detection, 58

and renal function, 50-51, *76

and tolbutamide, 58

ALCOHOL, and tolbutamide, 56

ALDOSTERONISM, *510

ALLERGY, 58-59, *71, *73, *77-78, 278,

331

photo-, *158, *254

ALLOXAN, diabetes. *See* Diabetes mel-

litus, alloxan-induced

AMERICAN DIABETES ASSOCIATION

Adler Foundation Research Fellowship,

83

Affiliate Associations

Detection Drives, 393-396

news, 85, 170-171, 260, 345, 430-

431, 518

symposium of Clinical Society of

New York Diabetes Associa-

tion, 173

annual banquet, 424

attendance at, and at postgraduate

course, 344

annual business meeting, 343, 426-428

annual meetings

eighteenth, 82, 168, 256, 424

President's address, 425

scientific sessions, 256-259

nineteenth, 429, 515

Banting medals, 426

Banting Memorial Lecture, 257, 347-

356

SUBJECT INDEX 1958

Board of State Governors, 83, 515
 Committees
 Information for Diabetics, 516-517
 Research and Fellowships, 83, 169, 258, 344, 430
 Scientific Exhibits, 169, 428
 Council
 Assembly of Delegates, 516
 Bylaw amendment, 429
 officers and members, 79, 168, 256, 343, 424, 512
 Diabetes Week, 170, 344, 393, 430
 essay contest, 83-84, 169, 429-430, 516
 1957-1958 winners, 429
FORECAST
 Reprint Series, 516
 Summer Camp List for children, 170, 345
 Talking Book for Blind, 517
 Identification Card, 84
 International Diabetes Federation,
 third congress, 84, 169
 officers elected, 431-432
 Journal
 binders, 84, 170, 432
 editorials
 Diabetes in Turkey, 65-66
 Diet and Atherosclerosis, 64-65
 Heredity and Diabetes, 244-245
 Is the Metabolism of Peripheral
 Tissues Affected by the Arylsul-
 fonylureas, 61-63
 The "Kimmelstiel-Wilson Lesion,"
 495-496
 Oral Hypoglycemic Agents and
 the Controlled Clinical Study,
 324-326
 Pregnancy and Diabetes, 494-495
 Recent Reports on the Mechanism
 of the Action of the Arylsul-
 fonylureas, 409-410
 Stress, Corticoids, and Diabetes,
 410-413
 student subscription rates, 85, 170
 Lilly award, 168, 343, 425, 430, 516
 Membership Directory, supplement,
 170
 new members, 84, 170-171, 259, 345,
 517
 news notes, 85, 171, 260, 346, 431-
 432, 518
 obituaries, 86, 172, 260, 346, 432, 518
 personals, 86, 171-172, 260, 346, 432,
 518
 postgraduate courses, 79-82, 168, 171,
 343-344, 428-429, 512-515,
 518
 publications
 binders, 84
 Diabetes Abstracts, 84, 170, 345
 Diabetes Guide Book for the Physi-
 cian, 516
 Facts About Diabetes, 170, 432
 Meal Planning with Exchange Lists,
 83
 Proceedings of American Diabetes
 Association, 517
 Recipe Book, 430, 517
 Reprints, 516
 research fellowships, 83, 169, 259,
 344, 430
 scientific programs, 257, 424, 515
 exhibits, 169, 428

AMINO ACIDS
 See also specific acids
 and blood sugar, *78, 392, *519
 in cataract formation, 25
 and dietary protein, in liver function,
 207
 and hyperglycemia, *416
 and hyperlipogenesis, 484
 plasma, and tolbutamide, *159
 renal glycosuria, *73
AMINO BENZOIC ACID, 226
**p-AMINO BENZOLSULFONAMIDISO-
 PROPYLTHIO DIAZOL**, *77,
 *421-422
AMPHETAMINE, 8
AMPUTATION, and arterial insuffi-
 ciency, *167
 and survival, *70-71
AMYLDIGUANIDE, 87-90
AMYL-FORMAMIDINYLIMINOUREA,
 469
ANDROSTERONE, urinary, 10-12
ANEMIA
 after carbutamide, and cortisone, 319
 hyperchromic megaloblastic, *337
 pernicious, 454
 and agammaglobulinemia, *252
 controlled by liver extract, 60
ANESTHESIA, *70, *160-161, *416
 in delivery, *505
ANEURYSM
 arteriosclerotic aortic, 99-100, 105, 106
 retinal, and fat transport, 223
 ventricular, 99, 106
ANGINA PECTORIS, and insulin, 97
 and tolbutamide, *418-419
ANOREXIA
 and cerebral excitation, 8
 change from excessive appetite to,
 *419
 and diguanides, 89
 prediabetic, 350
 and tolbutamide, 55
ANTIBODIES, insulin, estimation, 462-
 466
AORTA, arteriosclerosis, 98-107
D-ARABINOSE
 blood clearance, 148
 and serum phosphorus, *502
L-ARABINOSE
 insulin-responsive, and tolbutamide,
 *250
 urinary excretion, 37, 148
ARGININE, *416
ARLIDIN, in ischemic ulcerations, *417
ARMANNI-EBSTEIN NEPHROPATHY,
 *423
ARTERIES: *See* Blood vessels
ARTERIOSCLEROSIS
 and aging, *73, *164, *340, *422
 of aorta, 98-107
 cerebral, *73, 103, 105-106
 coronary artery, 98-107
 hypertensive, 105, *500
 and serum lipids, 194

ARTHRITIS, and insulin resistance, *77-
 78
ARTOSIN, *76
ARYLSULFONYLUREAS
 See also Sulfonylureas
 in aging, *165
 beta-cytotropic hypothesis of action,
 409-410
 and glucose utilization, 63
 and insulin release, 61, 63
ASPIRIN, in diabetes, *253, *338
ATELECTASIS, and fetal mortality, 443
ATHEROSCLEROSIS
 coronary, *163
 occlusion, and fat transport, 223-
 225
 and dietary intake, 228
 fats, 64, 228
 protein, 208, 210
 embolization, 99
 and essential fatty acids, 266
 and gangrene, *70-71
 and hyperlipemia, 64
 in necrotizing papillitis, 117
 renal lesions, *164
 and serum lipids, 64, 190, 201, *423
 and carotene, 200
 and tolbutamide response test, 459
 and vascular complications, 64, 386
AZOTEMIA, 11-12, 375-383

B

BALANITIS, *72
BANTING MEMORIAL
 lecture, 257, 347-356
 medals, 326
BARBITURATES, and tolbutamide, 56
BENEDICT'S TESTS, 312-315, *337,
 394, 398-401, *423
BENZIDINE, *506
BENZOLINE, *163
BIGUANIDES. *See* Phenethylbiguanide
BLOOD
 See also Blood sugar; Plasma; Serum
 amino acids, *78, 392, *519
 arterial, 270, 392, 453
 measurement, 449
 capillary, and sulfonamides, 56
 cholesterol, in obese diabetics, *76,
 240
 in diabetic ketoacidosis, 232, 234
 and dietary glucose deficits, 192
 eosinophils, *252-253, *511
 erythrocyte volume, *416
 fatty acids, 191, 266
 fibrinolysin activity, 266
 fructose, and uptake rate, *501
 hemagglutination tests, 464
 α-ketoglutarate, 149-151
 lactescence, 194
 mucoproteins, *416
 pentose clearance, 148
 pyruvate, 62, 149-151
 Rh incompatibility, *74
 and tolbutamide, 2-3, 62, 270, 409
 urea nitrogen, 9, 376-383
 and insulin action correlation, 382

SUBJECT INDEX 1958

nephrotic alloxan diabetes, 141
and renal damage, 50-51
in uremia, 376-383
venous, measurement, 449
water content, *416

BLOOD FLOW. *See* Circulation

BLOOD PRESSURE
See also Hypertension
and atherosclerosis, 64
auditory and cochlear responses, *160
in diabetic ketoacidosis, 234
and gangrene, *70-71

BLOOD SUGAR
See also specific conditions and specific hypoglycemic agents
and ACTH, 347, 348
and adrenal activity, *422
after amino acids, *78, 392, *519
arterial, and tissue glucose uptake, 450-453
arteriovenous, 392, 409, 449
and aspirin therapy, *253, *338
auditory cortex and cochlear function, *160
and central nervous system, *162
after p-chlorophenoxyacetic acid, *252
congenital diabetes, *72
correction, and psychotherapy, *338
after cortisone, 261-265
in diabetic acidosis, 435
entry and removal rate study, 358-363
and epinephrine, *74
fasting, misinformation from, *505
and gout, *78
and growth hormone, *252, *421, *507
hepatic regulation, 2-3, *506-507
in hyperlipemia, 240
after ingested sugar, 241
and temperature, *500
and insulin shock therapy, *335
and intralenticular osmotic changes, 23
maternal, and fetal rabbits, *71
neonatal pseudodiabetes, *72
and nephrosis, 143
after noradrenalin, *77
and obesity, 238, 241
of pancreas, *500, *510
after pancreatectomy, 136-139
total, 305
and pentose metabolism, 148
peripheral, 62, *71, 88, 91, 267, 363, 409, *422, 449-453, *503
response to alloxan, 390
after saline, 4-7
and senile confusion, *73
and Synthalin A, *249
tests, 57, 365
Benedict's, 312-315, *337, 394, 398-401, *423
caramelization, *335
Clinistix, *75, *163, *331, *336-337, 393-396, 398-401, *420, *423
colorimetric micromethod, *337
dextrotest, *509
Dreypak, 393-396
Folin-Wu method, 487-489
glucose oxidase, *70, *75, *161, *251, 312-315, *334, *337, *339, 378, 393-397, 486-489
Kansas study, *423
Minnesota, 393-396
Nelson-Somogyi, 389, 456, 487-489

O-dianisidine, *161, *251
peroxidase, *161, *251
Tes-Tape, *70, *331, 393-396, 398-401, *420, *423
tolbutamide response test, 455-460
turnover rate, 359
in two-month-old diabetic Chinese, *71
in uremia, 375-383
and urine test positives, 394-396

BLOOD VESSELS
arteriolar, *255
hyalinization, *70-71
sclerosis and retina changes, *336
arteriosclerotic, *72, *164
complication development, 64, *164, *167, *252, *342, 474
and adrenal cortex, 9-14, *422
and duration of illness, 385, *422, *509
mucopolysaccharide metabolism, 51, *342
neuropathy, *72, *333, *419
peripheral, *72, 384-387
retinopathy, 50-51, 167, *252, *255, *342, *418, *422
serum protein pattern, 46-51
and transmetatarsal amputation, *167
endothelial, after cobalt, 369
in hypokalemia, 233
mesenchyme reaction and adipose tissue, 218, 220
pelvis, 494
calcification, 440
uric acid metabolism, 386
venular dilatation and congestion, *502-503

BODY
composition, and cortisone, 213, 220
growth, *422
and amyldiguanide, 89
and biguanide therapy, 474
and lipoic acid, 180
thermochemical efficiency of, *252, *422
and yeasts, 294
weight. *See* Obesity; Weight

BONE
in alloxan diabetes, *421
marrow depression and carbutamide, *75

BOOK REVIEWS
Biochemistry, by Abraham Cantarow and Bernard Schepartz, 69
Care of the Long-Term Patient, by Commission on Chronic Illness, 329-330
Chemistry of Lipides as Related to Atherosclerosis, edited by Irvine H. Page, 415
Counseling in Medical Genetics, by Sheldon C. Reed, 155
Diabetes as a Way of Life, by T. S. Danowski, 415
Food, Nutrition and Diet Therapy, by Marie V. Krause, 499
Foundations of Nutrition, by Clara M. Taylor, 328-329
Hormonal Regulation of Energy Metabolism, edited by Laurance W. Kinsell, 415
Liver: Structure and Function, by Hans Popper, and Fenton Schaffner, 155

Low Fat Cookery, by Evelyn S. Stead and Gloria K. Warren, 69
Medical Progress, A Review of Medical Advances During 1956, by Morris Fishbein and twenty-nine contributors, 156
Obesity, Its Cause, Classification and Care, by E. Philip Gelvin and Thomas H. McGavack, 156
The Pathogenesis of Coronary Occlusion, by A. D. Morgan, 330
Practical Pediatrics, by R. Cannon Eley and Benjamin Kramer, 330
Symposium on Endocrines and Nutrition, edited by Frank H. Bethell, 329
Symposium on Nutrition and Behavior, edited by Joseph Brozek, 329
Technique of Fluid Balance, by Geoffrey H. Tovey, 329
The Treatment of Renal Failure, by John P. Merrill, 157

BOYDEN'S TECHNIC, *506

BRAIN
cortex, in glycemia control, *162
damage, and insulin, *420
coma, 306
shock, *159, *249
and diabetic pregnancy, *417-418
hemorrhage, and infarction, 103
in hypoglycemia, *72, *503, *508
and senile confusion, *73
phospholipid metabolism, *416
trauma, pancreatitis and diabetes after, *504

BUERGER'S DISEASE, *417

BUTYLAMINOBENZENESULFONYL-UREA. *See* Carbutamide

BZ-55. *See* Carbutamide

C

CALCIUM
absorption, and milk sugars, 45
serum, and biguanides, 470

CANCER
and diabetes, *158, 308
and adrenocortical activity, *76
pancreatectomy for control, 298-307
of pancreas, *158, 308, *500
disseminated islet-cell, *506

CANNON'S EMERGENCY RELEASE, 410

CAPILLARIES. *See* Blood vessels

CARBOHYDRATE
and cardiac glycogen, 201
and cochlear function, *160
dietary intake, 484, *502
and alimentary lipemia, 198
in cardiovascular disorders, *163
high, for urine tests, 393
and hypoglycemia, *341
and insulin use, 243
and plasma triglycerides, 198
and tolbutamide response test, 459
and fat, *78
lipogenesis, 198
and arylsulfonyleureas, 409
metabolism
and acetyl Co-A, *418

- and ACTH, 347, 348
and adaptation syndrome, 410
defect onset, 347-356
and diabetic acidosis, 230
and dimercaprol, *423
and endocrine glands, *507
and glucose, *71
and glycogen storage disease, *167
in gout, *78
and growth hormone, *159, 201, *339
hyperthyroidism, *507
and α -ketoglutarate, 150
and ketonemia, *418
and liver dysfunction, *506-507
and nephrosis, 142
in newborn, *501
and noradrenalin, *77
and oral hypoglycemic agents, *70, *73, *76, 291, 452, 461
pathways, *78, *510
in pregnancy, *249
and serum triglyceride concentration, 194-199
in spinal cord injuries, *501
and thyroid, *159
and vitamin B₁₂, *417, *502
protein binding, 51
tolerance, *71, 347, 355
and cortisone, 265
and cortisone-glucose tolerance, 355
in obese, 237-238, 240
susceptibility to diabetes, 348-349
utilization, 190-192, *421
and arylsulfonylureas, 409
- CARBUTAMIDE**
after adrenalectomy, *419
alpha-cytotoxic action, *77
and blood sugar, 53, *70, 288-291, *331, *338, *419-422, *501
and carbohydrate metabolism, *70, 291
and cortisone, *73-74, *159, 283-286, *319
dosage, *420
multiplicity of reactions, 316-319
species difference, 54-55
effectiveness, *72, *249, *421, *423
and duration of illness, *73-74
in juvenile, *70, *74, *255, *423, *509
epidermolytic reaction, *340
and glucose tolerance, *338, *419
hypoglycemia, 53, *77, *250, *336, *420, *425
delayed, 318-319
inhibition of insulinase, *76-77
and insulin, *341
sparing action, *70
and liver glycogen, 291, *419
in outpatient care, *335
in pancreatized dogs, 288, 291
serum responses, *75, 288-291, *335, *420
side effects, 55-56, *72, *75, 319, *331, *341
photo-allergy, *158, *254
and sulfonamides, 56, *165
and sulfonylureas, *75
and thyroid radio-iodine uptake, *165
and tolbutamide, 55, *70, 283-286, *335, 475
- CARCINOMA.** See Cancer
- CARDIOVASCULAR DISEASE.** See Heart, disease
- CENTRAL NERVOUS SYSTEM**
and blood sugar control, *162
in children born to diabetic mothers, *417-418
development, and galactose, 45
and hypoglycemia in congestive failure, 147, *160
and insulin reactions, *255
and renal tubular function, *339
and serum proteins, 51
- CHASSOVNIKOV, S. G.,** 413-414
- p-CHLORPHENOXYACETIC ACID,** *252
- CHLOROPHENYLDIGUANIDOHEN- ANE,** 88
- p-CHLOROPHENYL-ISO-PROPYL- DIGUANIDE ACETATE,** 88
- CHLORPROMAZINE,** 277
- CHOLESTEROL**
in arteriosclerosis, 98
dietary, 113
and fat transport, 118, 205, 220, 226
liver, 204-206
in pancreatized, insulin-deprived baboons, *504
serum content, 113, 194-195
and atherosclerosis, 64
and carbutamide, *75
after dietary protein, 202-208
hypertensive disease, 65
and Kimmelstiel-Wilson syndrome, 240-241
in lipemia, 196, 203-204, 240-241
nephrotic alloxan diabetes, 141
and obesity, 239
and retinopathy, 240-241
synthesis, 181-187, *418, *423
and taurocholate feeding, 205-206, 208
tolerance, 354
and xanthoma diabetorum, *337
- CHOLINE**
dietary, and fat transport, 204-208
and fatty liver, *419
plasma concentration, *422
in adolescent diabetic, 200
- CHROMATOGRAPHY**
in insulin coma, *333
urinary galactose, 37
- CHYMOTRYPSIN,** and insulin antago-
nist, 436-437
- CIRCULATION**
collateral, 99
transmetatarsal amputation, *167
coronary, in cardiovascular disorders, *163
in extremities and hypoglycemia, *248
triglycerides, *422
- CIRRHOSIS**
liver, *75, *508
and nutrition, *506-507
and phosphorus reabsorption, *505
- CITRATE**
and diabetic ketosis, *503
urinary output, *337-338
and zinc concentration, *161
- CLINISTIX TEST,** *75, *163, *336-337, *420
and Benedict's test, 398-401, *423
in Minnesota study, 393-396
- COBALT,** and pancreas, *166, 368-374
- COMA**
in children, *253
in diabetic pregnancy, 439, 442
and hypoglycemia, *338, 580
insulin, *76, *333
adrenocortical response, *337
and secondary cerebral damage, 306
waked from, with glucagon, *335
in juvenile diabetes, *502
medullary stage, and auditory cortex, *160
and peripheral vasomotor collapse, 234
and plasma insulin, *70
prediabetic, 350
recurrent, *74
and stress, 410
and temporary severe diabetes, 93, 94, 97
- CONVULSION**
of hypoglycemia, *338
after insulin, in toad, *509
phospholipids metabolism in, *416
- COPPER REDUCTION METHOD.** See Benedict's tests
- CORONARY ARTERY,** arteriosclerosis
sequelae, 98-107
- CORTISONE**
in Addison's disease, 454
and adipose tissue, 211-220
and body composition, 213
species difference, 220
and carbohydrate tolerance, 348, 355
and carbutamide, *73-74, *159, 319
and glucose, *74, *159, *167, 261-266, 284, 285, 348, 352-356
glycogen infiltration of pancreas, 16-18
and growth hormone, 16, *167
and hyperglycemia, *162-163, *417
and hypoglycemic shock, *331
and lipogenesis, 216
and obesity, 261, 353
in pancreatized, 17
and hypophysectomized baboons, *504
and stress, 410
and vitamin B₁₂, *417
- COWAN, CHARLES E.,** 59-61
- CREATININE,** in uremia, 376, 379
- CUSHING'S DISEASE**
diagnosis, 490-492
and intercapillary glomerulosclerosis, *74
and stress, 410
- CYSTINE,** and liver function, 207, 283-286
- D**
- D-860.** See Tolbutamide
- DBB.** See Amyl-formamidinyliminorea
- DBC.** See Methylbenzyl-formamidinyliminorea
- DBI.** See Phenethylbiguanide
- DBTU.** See Isoamyl-formamidinyliminorea
- DECAMETHYLDIGUANIDINE,** 88
and islet cells, *249
and pancreatic extracts, *166

DEHYDROASCORBIC ACID, *163,
*509

DERMATITIS, 55, 319
as diagnostic warning, *72

DEXTROSE, and hyperglycemia, *416

DEXTROTEST, *509

DIABETES MELLITUS

See also specific conditions, specific
hypoglycemic agents

and adrenalectomy, *422

age of onset, 29-31

angiopathies, *252

and environmental factors, 244-245,
411

and Orinase, *77

and pregnancy, 56

in rat, 388-391

and sulfonylureas, *249

and vascular complications, 51,
*165, 384-386

and aldosteronism, *510

alloxan-induced, 56, *509

and ACTH, *162-163

in adrenal-demedullated hypophy-
sectomized, *502

and adrenalin, *74

and age, 137-139, 388-391

bone changes, *421

and carbutamide, 56

and cataracts, 21-25

and central nervous system control
of glycemia, *162

and cortisone, *162-163

and dehydroascorbic acid, *163

and glucose uptake, *163-164

glycogen infiltration, 15-19

in hamster, *251

and hydropic degeneration, 20

hyperlactacidemia, *74

hypoglycemia phase of onset, 388,
391

inflammatory response, *340

insulin, intravenous, 362

lipogenesis in, 211

and mucormycosis, *70

and nephrosis, 140-146

after pancreatectomy, 56, 136-139

pancreatic islet cells, 389-391

and spontaneous diabetes in infant,
*507

and sulfonamide, 56

and sulfonylureas, 56

and tolbutamide, 53-59, *77, 388-
391, *418-419

triphasic response, 388, 391

ambulatory care, *72, *334, *421

outpatient, *335, *336

and anesthesia, *70, *160, *161, *505

and angina pectoris, *418-419

and aspirin, *253, *338

and automobile accidents, *70, *74,
471

and bacteremia, *337

blood sugar. *See* Blood sugar

brittle, 441

and carcinoma of pancreas, 308, *417
primary, 311

cardiovascular complications, *511

care of newborn, 448

and central scotomata, 25

childhood, *507

and menarchial age, 30

complications, 384-386

See also specific conditions

concepts, *161, *421

from Rollo to Banting, *500

and cortisone. *See* Cortisone
detection drives, 312-315, *423, 393-
395, *507

limits of short-term study, 395

diagnosis, 354-355

differential, *159

duration, 237, 384-386

and gangrene, 386

and insulin antibodies, 464

and late lesions, *165, *509

and life expectancy, 237, 242

and management, 53-59, *73-74,
*249, 435, 469-472

and renal function, *76

serum protein pattern, 46-51

in elderly, *162

and arteriosclerosis, *73, *164, *340,
*422

mammary periductal hyalin, *163

and oral hypoglycemic agents, *78,
*165

senile confusion, *73

and Z-N-Insulinum Organon, *78

etiology, 27-28, *161, 238, 241

cortisone-glucose tolerance, 347-356

environmental factors, 244-245, *507

family factors, 27-28

genetic, 411, *507

and potentiality, 355

in father, 33-35

and infant birth weight, 35

fragile, *509

and heredity, 27, 93, 238, 242, 244-
245, 310, 354-356, 411, *416,

*419, *421, *506

17-hydroxycorticosteroid excretion, 11,
*160

hypernatremia, *72

hyperthyroidism, *252

incidence, 27-31, 106

childbearing population, 447

in Japan, 133-135

in siblings, 34-35, *506

identification card, 84

insulin resistance, *77-78, 466

and insulinoma, *164, *339, *341

and hormone-producing, *334

and islet cell tumor, *164

juvenile, 55-56, *253, 440-444

acidosis, *502

biguanides, 468-476, *506

carbutamide, *70, *74, *255, *423,
*509

coma, *502

fatty acids, total, 200

and Lente insulin, *417

long-term problems, 470

peri-insular halos in, *162

plasma cholesterol, 200

remission phase, 470, 474

and sulfonamides, 56

sulfonylureas, *255

and tolbutamide, 58, *70, *164,
*255, *509

urine tests, methods comparison,
398-401

and vascular complications, 384-385

and Z-N-Insulinum Organon, *78

ketosteroid excretion, 10

and Kimmelstiel-Wilson syndrome, 228

labile, 57, *164

and biguanides, 91, 471

and sulfonylureas, *341

sympathotonia, treatment, *253

and tolbutamide, 57, *333, *418-
419

and law, *250, *333

and leukemia, co-existent, *420-421

life insurance for, 320

lipoplethoric, *75

liver disease, *506

manifestations, 242, 411, *419

congenital, *72, *254, *417-418

mental deficiencies, *417-418

and nephrosis, experimental, 140-
145

mortality, 109-112, 237, *511

See also Diabetes Mellitus, statistics
and mucopolysaccharide metabolism,
51, *342

mumps and alveolar abscess, *505

and myocardial infarction. *See* Myo-
cardium, infarction

neonatal pseudo-, *72

neuromuscular chronaxie, *158

office management of, *253

parotid swelling, 25

pentosuria, 37

periductal hyalin breasts, *163

precoma, hypernatremia, *72

and prediabetic state, 347-356

infants born of, 56, *253, 440-444

stillborn, 448

predisposition, 27, 411

and pregnancy, *162, *167, *420

delivery time, 443, 448

and infant hormonal imbalance, *253

and infant size, 33-35, 355, 446, 448

and intra-uterine death, *75

management, *159, *250, 443, 448,
*505

mortality in neonatal period, 495

senescent placenta, 443

probable, 349-356

and glucose tolerance, 349-353

protein metabolism, *249

pyrimidine metabolism, *249

remission, complete, 93-97

criteria, 96

severity, *421, 475

fluctuations, 93

grading, 385

and perinatal loss, 440

tolbutamide response test, 455-460

White's criteria, 440

and socio-economic status, *418

stable, *164

blood glucose concentration, 455

Lente and unmodified insulin, *73

and sulfonylureas, *341

and tolbutamide, *418-419

and zinc-suspensions, *78, *159

statistics, 403-408

by age, 406-407

Canada mortality, 403, 408

in countries, by sex, 408

England and Wales mortality, 403,
408

life expectancy, 237, 321

life insurance policy holders, 403

by race, 406-407

by sex, 406-407

United States, 403-407

by geographic region and state,
404-406

and steatorrhea, *507

steroid, 410
 bronchial carcinoma, *76
 and stress, *166, 410-411
 sympathetic nervous system, *166
 traumatically induced, 411, *504
 treatment, and age, 29-31, *165, *340
 and tuberculosis, *70, *166, *331, *342, *507
 in two-month-old Chinese baby, *71
 unstable
 and Orinase, *418-419
 and plasma fatty acids, 191
 and zinc-suspension, *166
 in war-stricken countries, 411
 Week, 170, 344, 393, 430

O-DIANISIDINE
 in blood and urine sugar movement, *251
 in glucose determination, *161

DIAZOLE, 445

DIBENZYLIN, *166

DIET
 and atherogenesis, 64-65, 208, 210
 and biguanides, 473
 calcium-phosphorus ratio and cataracts, 25
 caloric intake, 239, 240, *502
 carbohydrate intake, *502
 and plasma triglycerides, 198
 and cholesterol levels, 206, 207, 210
 choline, 204-208, 210, *419
 in diabetes control, 239-241, 387, *419, 478
 blood-sugar-lowering ability, *505-506
 exchange lists, *165
 modifications, *335
 fragile, *509
 and insulin, 470
 late vascular complications, *165
 sciatic neuropathy, 494
 and vision, *76
 for essential and polyunsaturated acids, 193
 and fat transport, 45, 202-210, 227-228
 of first insulin patient, 60-61
 galactose, 45
 free, in congenital galactosemia, *249
 and growth, thermochemical efficiency, *252, *422
 and hypoglycemia after hot and cold meat, *331
 low-fat, 239-241, 386, 387, 478
 methionine, 204, 206-208
 pre-blood glucose determinations, 456
 protein, 202-210, *252, *422
 and nephrosis, 144
 and serum constituents, 113, 204-210
 for weight control, *419
 and tolbutamide, 53-59

DIGUANIDINES, 89, 489

DIHYDROERGOTAMINE, *416

DIMERCAPROL, and carbohydrate metabolism, *423

DINITROCRESOL, *162

DIURESIS
 and amphetamine, 8
 and benzoline, *163
 and extracellular hypertonicity, *72
 in hydramnios, 494

DREYPAK TESTS, 393-396

DYSPHAGIA, *507

E

EAR, response to hypoglycemia, *160

EDEMA
 and adrenal hyperactivity, 9-14
 and central scotomata, 25
 in retinopathy, 241

ELECTROPHORESIS
 serum proteins, 46-51, 365-366
 and urinary, in nephropathy, 11
 and sulfonylureas, *75
 and trichloroacetic acid precipitation of insulin, 38-45

ENDOCRINE CRISES, management, *75-76

EPINEPHRINE
 and alloxan diabetes, *74
 and eosinopenic action of glucocorticoids, *252-253
 and glucose disappearance in eviscerated dogs, *419
 and hyperglycemia, 89
 and insulin, 89, *419
 anti-effect, 272-277
 and tolbutamide, 7, 89

ERYTHROBLASTOSIS FETALIS, 446

EYES
See also Retinitis; Retinopathy
 cataracts, 237
 development and reversal, 21-26
 senile, *76
 and duration of illness, *422
 and glucose tolerance, 351
 refractive changes, *76, *336
 and serum proteins, 48-49
 small-vessel degeneration in, *418
 tears, glucose test, *163
 vitreous glucose, 24
 and hemorrhage, 351

F

FAT. *See* Lipids

FATS, neutral. *See* Triglyceride

FATTY ACIDS
 and adaptive hyperlipogenesis, 484
 carbohydrate interrelation, *78
 and cholesterol transport, 118
 and endocrine glands, *418
 essential, 146, 266
 in glucose formation, *78, 176
 and insulin, 6, 61, 200
 and ketogenesis, 175-178
 liver, 6, 176-178
 adipose tissue ratio, 212
 nonesterified, 62, 189, 198
 peripheral, 5-7
 plasma, 190
 synthesis, 175-178, *418
 lactating mammary gland, 483
 pathways, *78, 178, 181-187, *340
 and tolbutamide, 6, 7, 61, 62
 triglycerides, 194-198

FETUS
 in diabetic pregnancy, 439-444, 494-495
 alloxan-induced, *507
 classification of losses, 494
 pancreatic duct epithelium ambipotentcy, *506
 survival, *167
 and prediabetes in mother, 355, 495

FLUID
 in acidosis, 230-234, *505
 cerebrospinal, *163
 extracellular, glucose, *161
 in pregnancy, 442
 therapy, *75-76, 230-234

FOLIN-WU METHOD, 487

FOOD, drive and satiety, *250-251, *420
See also Diet; Nutrition

FRUCTOSE
 eosinopenic reaction, *511
 and fatty acids, 176, 191
 and glucose, 191
 and hyperglycemia, *501
 intolerance, *331
 hereditary, *334
 and serum phosphorus, *502

FURUNCULOSIS
 as diagnostic warning, *72
 and glucose tolerance, 350-351

G

GALACTOSE
 renal glycosuria, *73
 and serum phosphorus, *502
 urinary, 37
 utilization, 45

GALACTOSEMIA
 congenital, *249, *254, *334
 and lactose tolerance, *334

GANGRENE
 atherosclerotic, *70-71
 incidence, 385-386
 symptoms, 384
 three phases, *505

GASTROINTESTINAL TRACT
 colon bacilli, and BZ-55, *331
 in diabetic pregnancy, 442
 glucagon effect on, *510
 insulin passage across, *421
 lipemia, and carbohydrate intake, 198

GLOMERULOSCLEROSIS
See also Kimmelstiel-Wilson disease
 and adrenal cortex, 11-12
 intercapillary, *70-71, *74, *158, 383, *418, 495-496
 metabolic changes, *158

GLUCAGON
 in cat and dog, effects of prolonged, 129-131
 in disseminated islet-cell carcinoma, *506
 and fatty acids, nonesterified, 189
 and gastric secretion, *510
 and glycosuria, 131
 and growth, chick embryo, *503
 hyperglycemia, 89, 131
 and insulin, 89, *254, *503
 coma, *335, *501
 treatment of reactions, *333
 and peripheral glucose, *254, *503
 in pregnancy and puerperium, *249
 and renal function, *503

SUBJECT INDEX 1958

- and tolbutamide, 89
 - tolerance, *338-339
 - tumor growth inhibition, *510
 - GLUCOSE**
 - absorption, 492
 - amino acids, and appetite, 392
 - arteriovenous differences, 453
 - blood levels. *See* Blood sugar
 - and carbutamide, *70, *73-74, 284-285, 288, *338, *419, *501
 - in cataract development, 24
 - cell equilibration, *161
 - cerebrospinal fluid, *163
 - chloroform production from, 492
 - and cortisone, *74, *159, *167, 261-266, 284, 285, 348, 352-356
 - and dehydration, *162
 - in diabetic acidosis, *505
 - and fatty acids, *78, 176, 189
 - formation, *78
 - and arylsulfonyleureas, 409
 - via Krebs cycle, *78
 - gestational change in peripheral utilization, *249
 - and hydropic degeneration of beta cells, 20
 - and hyperglycemia, 379
 - and insulin. *See* Insulin, and glucose intravenous, *161
 - and blood-insulin activity, *167
 - and lenticular energy, 24
 - lipogenesis from, 219-220
 - and liver, 4-7, *70, 89, *158, *163-164, 178, *338, *362-363, *419
 - metabolism, 23, 178, 181-182, 382, *419
 - Embsden-Meyerhof routes, 181, 220
 - in muscle tissue, *76
 - oxidase tests, *70, *75, *161, *251, 312-315, *334, *337, *339, 378, 393-397, 386-489
 - oxidation, 89, 211, 217
 - and ketogenesis, 178
 - and phenethylbiguanide, 88, 89, 91, 449, 452, *511
 - in plasma and erythrocyte water, *416
 - portal-hepatic differences, 2
 - and preparation for anesthesia, *70
 - in renal glycosuria, *73
 - after saline, 4-7
 - and serum phosphorus, *502
 - and tolbutamide, 2, 4-7, 62, *70, 89, 267, 285, 363, *422, 452
 - tolerance 58, 62, *70, *74, 261-266, *335, *338, 378, 382, 394
 - and abdominal wall abscess, 351
 - after adrenalectomy, *419
 - and cancer, 311
 - and carbohydrate metabolism, *507
 - in cystic fibrosis of pancreas, *506
 - and fasting or underfeeding, *504
 - in hyperazotemia, 375-383
 - after intragastric gas and posture, *163
 - in mothers of stillborn infants, 447
 - and neonatal pseudodiabetes, *72
 - in nondiabetic relatives, 354
 - nonspecificity of oral test, 455
 - in obesity, 238, 261-266
 - in prediabetes, *251, 348-356
 - and prednisone, *74
 - and probable diabetes, 349-355
 - and protein foods, *254-255, *331
 - two-month-old Chinese, *71
 - in uremia, 375-383
 - tubular reabsorption, *339
 - turnover rates, 360-363, *507
 - uptake, *161, 296-297, 449, 451-453, *511
 - hormonal influences on, *167
 - mammary gland, *501
 - peripheral, 62, 88, 91, 267, 363, *422, 449, 453, *503
 - and pH, *510
 - by rat, 380
 - and Synthalin, 89
 - without insulin, 284
 - after zinc insulin, 42
 - urine excretion. *See* Glycosuria; Urine, sugar content
 - utilization, 88, *341, 363
 - and adaptation syndrome, 410
 - and glucagon, *503
 - in hypoglycemia, 212
 - in pancreas and heart tissues, *161
 - and sympatholytic and adrenolytic substances, 274-276
 - after thyroidectomy, *507
 - vitreous, 24
 - hemorrhage, 351
 - GLUCOSE-6-PHOSPHATE**
 - in lipogenesis, 220, 483
 - of liver, 61
 - and carbutamide, *70
 - in ketogenesis, 178
 - and tolbutamide, 7, *511
 - and triphosphopyridine, 192, 220, 483
 - GLUTATHIONE**, and insulin, *76-77
 - GLYCOGEN**
 - after carbutamide, 284, 291, *419
 - in cardiomegaly, 99
 - after cortisone, 284
 - and degranulation, 20
 - discovery of, 271
 - and hyperlipogenesis, 478-484
 - and insulin, 5-6, 61, 89, 285, *502
 - intracellular concentrations of, *509
 - liver, 67, *419, *502
 - and growth hormone, *159
 - and hyperglycemia, *416
 - after perfusion, *158
 - and phenethylbiguanide, 87-89
 - and potassium deficiency, *503
 - retention, *159
 - and sulfonyleureas, *75
 - and Synthalin, 89
 - muscle, 5-6, *509
 - in pancreatic duct epithelium, 15-19
 - storage disease, *167
 - in thyrotoxic, *159
 - and tolbutamide, 5-6, 61, 284, *511
 - vacuolization of tubules, *423
 - GLYCOSURIA**
 - and ACTH, *163, 347
 - and aspirin therapy, *253, *338
 - and benzoline, *163
 - and biguanides, 473
 - carbohydrate excretion in, *73
 - congenital diabetes, *72
 - and cortisone, *162-163
 - in Cushing's syndrome, 492
 - in diabetic pregnancy, *160, *420, 440
 - enzyme tests, false positive reactions, *334
 - and glucose, *339
 - tolerance, 350-351
 - and glucuronic acid, *251
 - and growth hormone, *249, *421, *507
 - and hepatic changes, *506-507
 - and hydroxycorticoid values, 490
 - and insulin, 470
 - and low-calorie diet, 239
 - neonatal pseudodiabetes, *72
 - and nephrosis in alloxan diabetes, 141
 - neuropathy and retinopathy prior to, 243
 - nocturnal reactions to Z-N-Insulinum Organon, *78
 - after noradrenalin, *77
 - and pancreatic carcinoma, *158, 308
 - prediabetic, 350-351
 - renal, and lactose, *73
 - serum lipids, 241
 - and steroid hyperactivity, 410
 - and sulfonyleureas, 54-55
 - symptomless, *419
 - and tolbutamide, 56, *332, *334, *508
 - in two-month-old diabetic Chinese, *71
- GROWTH HORMONE**
 - in alloxan diabetes, *159
 - and carbohydrate, *159, *339
 - and cardiac glycogen, 201, *339
 - and fatty livers, *419
 - and glucose uptake, *167, *418
 - and glycosuria, *249, *421, *507
 - after hypophysectomy, *421, *507
 - and insulin effect, 436
 - ketogenic effect of, *504
 - and nitrogen metabolism, *339
 - and pancreas infiltration by glycogen, 16
 - and protein metabolism, *339
 - "steroid" diabetes, 410
- GUANIDINE-DECA-METHYLENE-GUANIDINE**, 469
- H**
- HEART**
 - See also* Myocardium
 - congestive failure, 103, 147
 - in diabetic ketosis, *502
 - disease, and arteriosclerosis, 64-65
 - cardiomegaly criteria, 99
 - coronary, 14, 98-106, *163
 - familial, and nutrition, 65
 - hemodynamics in hypoglycemic coma, *500
 - metabolism, *500
 - peripheral circulatory failure, *72
 - tissue, and pancreas interactions, 161
- HEPATECTOMY**, and sulfonyleureas, *510
- HEPATITIS**, *72, *75, 319
- HEREDITY**
 - of atherosclerosis, 64
 - of diabetes, *421
 - and age of onset, 27, 244-245, *506
 - and carcinoma of pancreas, 310
 - gene therapy, *416
 - incidence, 27, 242, 354-356, *419
 - and of obesity, 238
 - and remission, complete, 93
 - and stress, 411
 - transmission in heterozygotes, *506
 - twins, of diabetic father, 34-35
 - multiple-type, 242

- HEXOSEMONOPHOSPHATE SHUNT**
in adaptive hyperlipogenesis, 481-485
and cholesterol synthesis, 181-187, 483
and ketogenesis, 178
- HORMONES**
See also specific
antidiabetic, *163
diabetogenic, *251
therapy in pregnancy, *76, 442, 495
- HYDROCORTISONE**
absorption, 492
and body weight, 220
excretion, *78
and ACTH, 9-14
in insulin coma, *337
in nephropathy, 9-10, 12
in retinopathy, 11-12, *417
glycosuria, and false value, 490-492
plasma, 9-12
- β-HYDROXYBUTYRATE**, 173, *509
- HYPERADRENOCORTICISM**, 213-214, 216
- HYPERGLYCEMIA**, *510
in acidosis, *74, 230
and renal failure, *74
and ACTH, *163, 347, *417
anoxemia, 147
and carcinoma of pancreas, *158
and cataract formation, 24
and *Clostridium perfringens* toxin, *416
and dehydroascorbic acid, *163
of dimercaprol, *423
glucagon-induced, *165-166
in blood amylase, *503
and growth hormones, *416
and hepatic changes, *506-507
and hypodermic change, 20
and insulin hypoglycemia, *165-166
neuropathy and retinopathy prior to, 243
nocturnal reactions to Z-N-Insulinum Organon, *78
and pachycarpine, *163
and pancreatitis, *510
after partial pancreatectomy, 139
in pregnancy, *249
after intrafetal insulin injection, *71
spontaneous, in alloxan diabetes, *507
serum lipids, 241
and sodium chloride, 380
and steroid hyperactivity, 410
and sulfonylurea usage, 54
and tolbutamide, 56, *508
triphasic response, 388
after urea, 379
and vitamin B₁₂, *417
- HYPERINSULINISM**
diagnosis, *338
surgical management, *342
in disseminated islet-cell carcinoma, *506
hemipancreatectomy for, *250
and hyperadrenocorticism, 213
and pancreatic islet cell adenoma, *338
- HYPERLIPEMIA**
and cholesterol, 196, 203-204, 240-241
and choline, 205-206
clearing factor, *423
and dietary fat intake, 64
and hexosemonophosphate shunt, 478-485
idiopathic, 203, 239, 241
and recurrent pancreatitis, *332
serum lactescence, 196
and xanthoma diabetorum, *337
- HYPERTENSION**
See also Blood pressure
and adrenal hyperactivity, 9-14
and age, *76, 441
and arteriosclerosis, 105, *500
and cardiomegaly, 99
and coronary circulation, *163
and duration of illness, *509
and gangrene, *70-71
and hypoglycemia, *163, *500
incidence, 99, 100, 106
and myocardial infarction, 32, 99-106
in pregnancy, fetal loss, 441-442
retina changes, 241, *336
and serum lipid fractions, 231
and thrombosis, 100, 102
- HYPERTHYROIDISM**, *158, *507
- HYPOGLYCEMIA**
See also Blood sugar; specific hypoglycemic agents
and adrenal cortical hyperactivity, 9-14
and anaerobic glycolysis, *255
in angina pectoris, 97
and auditory cortex, *160
blood constituents, 150
and blood flow in extremities, *248
and carbohydrate intake, *341
in cardiovascular disorders, *163
and hypertension, *500
causes, *75-76
and cerebral changes, *159, *333, *503
simulating stroke, *508
coma, *72
in congestive failure, 147
convulsive attacks, *338
simulating epilepsy, *339
electroencephalogram, 97, *255
and endocrine deficiency, *342
functional, *334, *342
and glucagon, *71
in hepatectomized, *510
and hepatic glucose output, 4-7, 362
and hexamethonium, 97
and hyperventilation, *255
after hypophysectomy, *252-253, *342
medical-legal complications during, *333
in nondiabetics, 459
and nutrition, *334
and phospholipid metabolism, *416
and potassium concentration, 97, *500, *503
shock. *See* Shock
and specific activity of blood glucose, 7
spontaneous, *254, *339
and temperature, *162
and tumors, *254, *339
simulating sarcoma, *251
and urinary 11-oxysteroids, 410
- HYPOGLYCIN A.**, *508-509
- HYPOPHYSECTOMY**
and blood sugar, after glucose, *502
glucose uptake in lactating rats, *500-501
- and growth hormone, *421, *507
and hypoglycemia, *342
and insulin injection in toads, *509-510
and pancreatectomy, in baboon, *504
and sulfonylureas, 54
- HYPOTENSION**, 232-233
- HYPOTHALAMUS**, and goldthioglucose, *160
- I**
- INDOLEACETIC ACID**
and insulinase activity, *252
response, in children, *336
- INDOLEBUTYRIC ACID**, *252
- INDOLEPROPIONIC ACID**, *252
- INFANT**
congenital diabetes, *72
See also Heredity
of diabetic mothers, 440, 446
adrenocortical function, *74
neurologic abnormalities in, *417-418
furunculosis, 350
galactosemia, 45
glycosuria, 350, *420
islets of Langerhans, 355-356, 446
hypertrophy in stillborn, 448
neonatal pseudodiabetes, *72
newborn, blood sugar and glucagon, *501
of prediabetic mother, 56, *253, 355-356, 440-444, 448
size, 33, 355, *420, 440
and diabetic father, 35
population comparison, 34-35
and wastage, 444
two-month-old Chinese diabetic, *71
- INFECTIONS**, 471-472
and arterial insufficiency, *167
and biguanides, 473
and carbutamide results, *73-74
and gangrene, *70-71
intercurrent, in diabetic pregnancy, 442
and metabolic alterations, *70
and necrotizing papillitis, 117
in prediabetics, 355
and retinopathy, *336
and sulfonylureas usage, 56-57
and tolbutamide, 58
- INSULIN**
and ACTH, *163
action, *420
antigenic, 462
and degradation rate, 43, *505
and heating in passively sensitized, 279
and of iodinated, in serum, 38-44
transport hypothesis, *340
in adaptation syndrome, 410
and adipose tissue, lipogenesis, 211-220
after adrenalectomy, 5-7
and adrenal gland of toad, *509-510
and adrenal steroids, 435
and amyldiguanide, 90
antagonism, *71, 434, 437, 461
and suprarenal cortex, *335
antibodies to, 462-466
antigen, in preparations, *336

and arylsulfonylureas, 61
 assay, 365-367, *508
 classifications, 58
 pancreas fibril formation in, *334
 and carbutamide, *70, 284, 291
 coma, *76, 306, *333, *337, *501
 concentration, and pH, *510
 and cortisone, 213, 284
 test, *252-253
 deficiency, *72, *75
 and metabolism, *418
 and pentose metabolism, 148
 and steroid hyperactivity, 410
 desensitization, *160
 in diabetes control, 3-7, 150, *167,
 230-234, 270, *332-333,
 *420, 434-435, 437, 470,
 *501, *505
 and arteriosclerosis, *73
 in children, *507
 complication prevention after pan-
 creatitis, *504
 and duration of illness, 435, 465
 fragile, *509
 prescriptions, *75
 and vision, *76
 discovery and usage, 59-61
 dosage, *250, 365, 466
 after pancreatectomy, 305
 eosinopenia, *252-253
 and epinephrine, 274-276
 hyperglycemia, 89
 and fatty acids, 6, 61, 200
 and glucagon, *501, *503
 carcinostatic action of, *510
 hyperglycemia, 89
 and glucose, 62, 89, *167, 211, 267-
 270, 285, *341, 358-363, 378,
 380, 422, 451, 453, *502,
 *503
 and metabolism of carbon atoms,
 219-220
 rate of utilization, *505
 specific activity, 4-7
 transport into aqueous, 24
 hemagglutination reactions and tannic
 acid, *506
 and hepatitis, incidence, *73
 and high caloric intake, *74
 immunologic studies of, *71, 278-282
 inhibition, *166, 274-276, 437
 and isoamylidiguanide, 90
 isophane, *73
 and ketosis, *77, 433-438
 and lactic acid, 89
 Lente, *71, *73-74, *76, *417, *506
 and lenticular energy, 24
 -like activity, *508
 from cation exchange resins, *416
 and lipogenesis, 200, 211, 219-220
 and liver, 2-7, 61, 62, 89, 211, 284,
 362-363, *419, *502
 inactivation in bullfrog, *166-167
 manufacture in Turkey, 66
 mesenchyme stimulation, 220
 metabolism, *166, 274-276, 437
 mammary gland slices, *500-501
 and thyroid, *159
 murder by, *416
 and muscle glycogen, 5-6, 89
 necrobiosis lipidica diabeticorum con-
 trol, *165
 and nerve impulse, *163
 and obesity, 218, *332
 and oxygen uptake, 217

and pancreas, 20, 148
 production in children, *336
 release from damaged beta cells, 388
 and pentose metabolism, 148
 peripheral, 6, 61, 267-270, 363, *422,
 449-453, *503, *508
 and phenethylidiguanide, 90
 plasma, estimation, *423
 in Pleuronectidae, *161
 portal, 409
 and hepatic differences, 2
 reactions, 58-59, *73, *78-79, *249,
 278, 331, *335, *341-342
 fatal cases, *420
 and fetal loss, 442
 glucagon in treatment, *333
 and surgery for diabetic, *160-161
 recrystallized, 466
 requirements, *73-74, *164-165, *418-
 419
 individual, 306
 in stress syndrome, 410-411
 resistance, 462, 475
 and acidosis, *77-78, 230, 437
 and plasma-insulin, *70
 and time factor, *71
 and respiratory quotient, 89
 sensitivity
 after hypophysectomy, *501
 and ketonemia, *251-252
 and vitamin B₁₂, *502
 serum, 48-51, 119-123
 shock, *71, *159, *249, *335
 and histiotoxic cerebral anoxia, *159
 in schizophrenia, *335
 single injection technic, *161
 standardization, *420
 and sulfonylureas, 54, 57, *70, *420
 differences in action of, *164-165
 and Synthalin, 89
 tests, *70, *77-78, 382
 therapy, thirty-fifth anniversary, 59-61
 and thyroid function, *158-159
 in toad, *509-510
 and tolbutamide, 1-7, 54-58, *77,
 *164-165, 267-270, 284,
 *333, 391, *418-419, *422,
 *508
 tolerance, 382, 461
 and triiodothyronine, *159
 trypsin inhibitor, *421
 and tumor growth, *510
 in uremia, 381
 and urinary 11-oxysteroids, 410
 and vascular mesenchyme, 218
 withdrawal, testing for, 57
 zinc suspensions, *71, *78, *159, *160-
 161, *166, *254, *332, 445
 and pH, *73

INSULINASE
 assay, 381-382
 after p-chlorophenoxyacetic acid, *252
 inhibition, by sulfonylureas, *76, 77

INSULINOMA, *164
 hormone-producing, *334
 simulating epilepsy, *339
 and spontaneous hypoglycemic attacks,
 *341

IPTD. See p-Aminobenzolsulfonamidiso-
 propylthiadiazol

ISOAMYLIDIGUANIDE, 88, 90

**ISOAMYL-FORMAMIDINYLMINO-
 UREA**, 468-469

J

JOSLIN, ELLIOTT P., 328

K

KETOACIDOSIS

See also Acidosis, diabetic; Ketosis
 and diabetic pregnancy, *167, 442,
 494

from fatty acids, and pyruvate, *509
 glucose uptake, 178
 hyperglycemia, 230
 lipoproteinogram, *500
 prevention, *71
 and stress, 410
 treatment of, 230-235, *500

α -KETOGLUTARATE, blood content,
 149-150

KETONE BODIES

See also Ketoacidosis; Ketonuria, in
 adaptive hyperlipogenesis

and ACTH, *163
 and adrenalin, *251-252
 analytic method, *252
 blood, 62, 232
 and insulin, *251-252
 and cortisone in alloxan diabetes, *162-
 163
 and fatty acids, 191-192
 metabolism, 173, 176
 liver production, *418
 metabolism, 186
 and endocrine glands, *418
 and tolbutamide, 57, 62, *159
 and triphosphopyridine, 186, 484

KETONURIA

and age, *419
 and aspirin, *253, *338
 and diet, *503
 and glycosuria, *420
 and obesity, *419
 after partial pancreatectomy, 139
 and sulfonamides, *165

KETOSIS, *503

and fetal death, 439
 and functional tests, *251-252
 and glucocorticoids, *418
 and insulin, *77, 433-438
 and loss of appetite, *419
 management, *75-76
 and phenethylbiguanide, 91-92
 and plasma 17-hydroxycorticosteroid
 level, *78
 and serum triglycerides, 200
 and sulfonylureas, 56
 and tolbutamide, 58
 and triphosphopyridine nucleotide, 187

17-KETOSTEROIDS, urinary, 410
 and ACTH, 9-14
 in insulin coma, *337

KIDNEY

See also specific conditions
 acetoacetate formation, 173
 in acidosis, 233
 and artificial kidney, *331
 and amyldiguanide, 89
 Armanni-Ebstein nephropathy, *423
 and biguanides, 470
 degeneration and anuria, *75
 and dehydroascorbic acid, *163
 and diabetes, mortality, *511

and duration of illness, *509
epithelium, glycolytic vacuolization,
*423
failure, *74
necropsy findings, *420
in papillitis, *167
and fat transport, 225-226
function, *76
and azotemia, 11-12
and coma, *74
glomeruli, *167, *255, 496
and isolating hyaline substance iso-
lated, *341
See also Kimmelstiel-Wilson syn-
drome
and hematuria, 266
hemodynamics, 233
in nephrosis, experimental, 140-145
papilla, necrosis, 116, *167
and nephrosclerosis, *420
reabsorption of glucose, *339
sodium retention, *72
and sulfonylureas, 56
and urinary 17-ketosteroids, 11
vascular lesions, 51, 103, *418

KIMMELSTIEL-WILSON SYNDROME,
9, *249, *420, 495-496
See also Nephropathy
in early retinopathy, 241, 243
fat in glomerular capillaries, 229
isolation of glomeruli from, *341
juvenile onset, 56
lipoproteins, 228, 241, 243
and plasma 17-hydroxycorticosteroids,
11
and uremia, 383

KWASHIORKOR, 204

L

LACTATE
and adrenalin, *74
and alloxan diabetes, *74
and biguanides, *511
and insulin, 89, 217
and phenethyldiguanide, 88-89
production in pancreas and heart tis-
sues, *161
and Synthalin, 89
and tolbutamide, 89

LENTE INSULIN, *71, *73-74, *76,
*417, *506

LEUKEMIA, *420-421

LEVARTERENOL, in ketoacidosis, 233-
234

LINOLEIC ACID, 146, 193

LIPEMIA RETINALIS, 239, *334

LIPIDS
absorption, 124, *422-423
and alipotropic nutrition, 205
in atherosclerosis, 64, 190, *201, *423
atrophy, and Lente insulin, *76
and carbohydrate metabolism, 194
clearing factor, *423
after cortisone-insulin, 213
and embolism, 222-224, 227
epididymal pad of rat for assay, *508
and exercise, 64
intake, 206, *422

metabolism, 190, 204, *423, *506-507
and ketonemia, *418
and lactate, 176
and obesity, 237-241
pathways, 187
and tolbutamide, *504
in pancreatectomized baboon, *504
pancreatic cells, 373
after cobalt treatment, 369, 371
plasma concentration, 200
serum content, 50, 64, 194-195, 199,
204, 207-208, 239-241
transport, 221-227, *422, *506-507
and dietary protein, 202-208

LIPOIC ACID, 180

LIPOPROTEIN
liver secretion in choline-deficiency,
205
serum, 50, 206-208
and alipotropic nutrition, 204
and atherosclerosis, 64
in hypertensive disease, 65
in lipemia, 203

LIVER

and alpha-ketoglutaric-glutamic sys-
tem, 150
after amyldiguanide, 89
and arylsulfonylureas, 409
and biguanides, 470
and carbutamide, 55, *70, 284, *419
cholesterol, 202-208
and cortisone, 211, 284
and dehydroascorbic acid, *163
disease, *73, *506
fat transport, 202-208, *506-507
fatty, 6, 116, 176, 200, 212, *419,
*423, *506-507
fibrosarcoma, *254
function, 92, 207, 470, *506-507
tests, *75
glucose, *70, 89, *163-164, *338, 362-
363, *419
glucose-6-phosphate, *511
glycogen, 5-6, *75, 87-89, *158-159,
166-167, 284, *416, *419,
*502-503
hemosiderosis, *337
hexosemonophosphate shunt activity,
483
and hypoglycemia, *254, *421-422
in congestive heart failure, 147
and insulin, 2-7, 62, 89, 211, 284, 362-
363, *419, *502
insulinase activity uptake, 382
and IPTD, *421-422
and ketogenesis, 173, *418, *509
lecithin, disappearance rate, *422
lipogenesis, 45, 210-211, *423, 478-
485
and cholesterol feeding, 206
of overnutrition, 478
and phenethyldiguanide, 87, 89, 92,
*338
and phospholipid, 204, *422
and serum lipoproteins, 202-208
and sulfonamide, 56
and sulfonylureas, 62, *165
and Synthalin, 89
and tolbutamide, 2-3, 6, 61-63, 89,
284, 362-363, 410, *511

LUNG, abscesses, necrotizing papillitis,
116

M

MALNUTRITION. See Nutrition

MELITURIA, *159, *420

MENARCHE, inception ages, and dia-
betes, 29-31

METHIONINE

dietary and fat transport, 204-208
and hyperglycemia after *Clostridium*
perfringens toxin, *416

N-4-METHYL-BENZOLSULFONYL-N-
BUTYLUREA, *420, *501

METHYLBENZYL-FORMAMIDINYL-
IMINOUREA, 469

MONILIASIS, *72

MUCORMYCOSIS, *78

MUMPS, and alveolar abscess, *505

MUSCLE

carbonate, in alloxan diabetes, *421
chronaxie shortening, *158
electrolyte concentrations, *421, *509
exercise, in experimental hypoglyce-
mia, *162
gastrocnemius, and amyldiguanide, 89
glycogen, 5-6, 89, *159, *509
after carbutamide, *419
and phenethyldiguanide, 89
and Synthalin, 89
after tolbutamide, 6-7
and insulin, 5-6, 89, *158-159
antagonist, 438
rehabilitation in neuropathy, 493
vitamin B₁₂ binding, *417

MYOCARDIUM

fibrosis, in necrotizing papillitis, 117
infarction, 64
and hypertension, 32, 99-106
incidence, and fatal acute, 14

N

NADISAN. See Carbutamide

NECROBIOSIS LIPOIDICA DIABETI-
CORUM, *72, *165, 242

NELSON-SOMOGYI TESTS, 389, 487-
489

NEPHRECTOMY, in necrotizing renal
papillitis, 114-117

NEPHRON, histochemistry, *417

NEPHROPATHY

See also Kidney
and adrenal cortex, 9-14
and age, *165
Armanni-Ebstein, *423
and childhood onset of disease, *252
in diabetic mothers, *75, 440
experimental, in alloxan diabetes, 140-
146
in pancreatic diabetes, *418
and recurrent coma, *74
serum, 48-51, 141
small-vessel degeneration in, *418

NEUROPATHY

biopsies of sural nerves, *419
in cerebral hypoglycemia, *508
diagnosis, *333
and hyperlipemia, *501

- and insulin, *158
optic, *76
and central scotomata, 25
pathogenesis, *72, *160, *419
in asymmetric and symmetric distal,
*510-511
peripheral, *511
myelin sheath degeneration, *160
prior to glycosuria and hyperglycemia,
243
sciatic, 493
serum proteins, 48-51
transmetatarsal amputation for, *167
- NICOTINIC ACID**, insulin-sparing ac-
tion, *73
- NITROGEN**
concentration, 392
and ACTH, 347-348
and tolbutamide, 62, *159
deficiency, 230-235
excretion, 347
nephrotic alloxan diabetes, 141
and phenethylguanidine, 87
metabolism, 348
after hypoglycemia, *418
in Pleuronectidae, *161
- NOORDEN**, Carl H. von, 326
- N-SULFANILYL-N₂-N-BUTYLCARBA-
MIDE**. See Carbutamide
- NOREPINEPHRINE**, 112
- NUTRITION**
See also Diet
alipotropic, 204
caloric intake, 8, 64
basal requirements, 243
and cardiac glycogen, 201
and cataract formation, 25
in diabetes management, *421
and essential fatty acids, 193
food-intake, *422
and lipogenesis, 64, 204, 216, 239
and temperature, *160, *500
and hepatic changes, *73, *506-507
and hypoglycemia, 147
in Japan, and diabetes, 133-135
and ketogenesis, 173
and sulfonylurea usage, 54
- O**
- OBESEITY**
and amphetamine, 8
and blood α -ketoglutarate, 150
and blood sugar, *78
and carbohydrate tolerance, 237-238,
240
and dehydrocorticosterone, 215-216
and diabetes, 56, 236-243, 353-355,
411-412, *419
and emotional stress, *166
and energy balance, 243
etiology, in mice, *420
and fat intake, 64
glucose tolerance, 238, 241, 354
after cortisone, 261-266
goldthiogluco-mice, and temperature,
*160
and glycosuria, 354, *420
hereditary aspects of, 237-238, 241
and predisposition, 411
and hyperadrenocorticism, 214, 216
hypothalamic, 211-212
and insulin, 218, *332
and islet hypertrophy, 214
and ketonuria, *419
and myocardial infarction, 32
and overeating, 239
and phenmetrazine, *76
in prediabetics, 355
types of, 238, 241
- OPIE**, Eugene L., 496-499
- ORINASE**
second symposium, *164
See also Tolbutamide
- OXALACETATE**, and ketosis, experi-
mental, *503
- P**
- PACHYCARPINE**, *163
- PANCREAS**
acinar cells, 369-373
and protein deficiency, *419
and amyldiguanide, 89
carcinoma, *158, 308-311, *417, *500
degranulation, 20, 369
and dehydroascorbic acid, *163
disease, and diabetes, 58, *418
duct epithelium, ambipotency, *506
ergastoplasmic sacs, 369
fibrosis, and fatty liver, *419, *506
glycogen infiltration of, 15-19, *165
and growth hormone, 16
and heart tissues, 147
oxygen consumption, *161
hydropic degeneration, 15-19
and hypoglycemia, 147
insulin-producing capacity, 389-391
antagonizing, 438
in children, *335
islets of Langerhans, 216
cell types
alpha, 89, 368, 371, *509
ergastoplasmic sacs, 371
hyperglycemic effect of pancre-
atic extracts, *166
and Synthalin A, *249
beta, 15, 17, 62, 369, 389-391,
409
degranulation, 125-127, 389-391
glycogen infiltration, 18, 19
and growth hormone, 18, *249
hypertrophy, *249
necrosis, 388
and sulfonylureas, 53-54
C, 389
and carbutamide, *421-422
after cobalt, 368, 369, 371, 373
after cortisone, 214
cytology of, *253
electron microscopy in pig, 368-
374
and glucagon formation, *165-166
glycosuria, and growth hormone,
*249
and insulin, 214
and IPTD, *421-422
and tolbutamide, 55, 62, *77, 125-
127, 388-391, *422-423
tumor, *164, *250
vacuolization, 15, 17, 368, 371
zymogen granules, 369, 373
enlargement, 446, 448
fibrosis, *506
hyaline, *158
hyperplastic, 355-356
in prediabetic, 355-356
and stillbirths, 355-356, 446
zinc concentration, *161
lipid, 369
and obesity, 215
peri-insular halos, *162
secretion, and glucagon, *503
and sulfonamides, 56
tissue, fibril formation assay of insulin,
*334
and tolbutamide, 58, 61-63, 389-391,
*421-422
ulcerogenic tumor, *510
- PANCREATECTOMY**
diabetes after, 411
total, 298-307
glycogen infiltration of pancreas, 16-17
and hyperglycemia after *Clostridium*
perfringens toxin, *416
and hypophysectomized baboon, *504
and insulin requirements, 305-306
partial, in alloxan diabetes, 136-139
and cortisone, 16-18, *504
and growth hormone, 18, *249
and sulfonylureas, 56, 61
- PANCREATITIS**
and blood sugar, *510
after cranial and thoracic injury, *504
peritonitis, and hyperlipemia, *332
- PAPER CHROMATOGRAPHY**, 36-37
- PAPILLITIS**, necrotizing, 116-117
- PEDG**. See Phenethylguanidine
- PENTOSE(S)**
in carbohydrate metabolism, *502
insulin-responsive, and tolbutamide,
148, *250
metabolism, 147-149, *510
and serum phosphorus, *502
urinary excretion, 37
- PEROXIDASE**
in blood and urine sugar movement,
*251
in glucose determination, *161, *251
- PHENETHYLBIGUANIDE**
in acidosis, 92, 473
and adrenal function, ACTH test,
*500
and growth, 474, 475
hypoglycemic effect, 468, 476
and dosage, 474-475
and insulin therapy, combined, 475-
476
in juvenile diabetes, 468-476
short-term treatment, 476
side effects, 474-476
toxicity, 91
- PHENETHYLDIGUANIDE**
and anaerobic glycolysis, 88
and glucose uptake, 89
peripheral, 449-453
hypoglycemic actions, 87-92, *225,
*338, *504, *508
inhibition of cytochrome oxidase, 90
and insulin, 88-89
and ketosis, 92
and liver, 89
metabolic effects of, *504, *511
and muscle glycogen, 89
structure, 87

SUBJECT INDEX 1958

- toxicity, 88-89, 91-92, 470
of derivatives, *508
- PHENETHYL-FORMAMIDINYLIMINOUREA**, 469
- PHENMETRAZINE**, *76
- PHEOCHROMOCYTOMA**, 410
- PHOSPHATE**
and carbutamide, 288, *335
hepatic-partial differences, 2-3
intracellular concentrations of, *509
serum, 2-3, 62, 290-291, *335
and monosaccharides, *502
and tolbutamide, 2-3, 62, *335
tolerance, *335
white cell activity, 454
- PHOSPHOLIPID**
in diabetes, 195
and lipemia retinalis, *334
lymph, 204, *422
metabolism, *416
plasma concentration, *422
in adolescent diabetic, 200
and serum cholesterol, 196
serum content, 206, 239-240
- PHOSPHORUS**
and hyperglycemia after *Clostridium perfringens* toxin, *416
and phospholipids metabolism, *416
renal, *505
and glucagon, *503
serum, and biguanides, 470
- PITUITARY GLAND**
anterior, *74
ketogenic action of, *504
and metabolic changes with stress, 410
tumors, 214
histopathologic studies, *74
and hypoglycemia in congestive failure, 147
- PLACENTA**
damage, after intrafetal insulin injection, *71
dysfunction and neonatal pseudodiabetes, *72
and fetal edema, *74
sugar transfer, *71, *501
vascular insufficiency, 494
- PLASMA**
cholesterol, 200, *422
fatty acids, 189-192, 200
17-hydroxycorticosteroids, *160
and ACTH, 9-14
in stable and brittle diabetics, *335
in uremia, 376-383
in hypoglycemic coma, *500
insulin, *342, *423
extraction, *70
and TCA precipitate, 43
insulin-like activity in, 62, *416
and tolbutamide, 62, *159, *160
water content, *416
- PLEURONECTIDAE**, giant islets, *161
- POTASSIUM**
in acidosis, 230-235, *502, *505
therapy, 112, 235
and carbutamide, 288
deficiency, *502
cellular restoration, 230-234
and liver glycogen, *503
- and endocrine crises, *75-76
excretion, and glucagon, *503
and heart, *502
hepatic-portal plasma and Orinase, 3-7
in hypoglycemia, 97, *500, *503
intracellular concentrations of, *509
muscle content, *421
serum, 289-291
in uremia, 376-383
after sodium chloride and urea, 380
urinary excretion of, 410
- PREDNISONE**, *74, *507
- PREGNANCY**, diabetic, *162, *167, *420, *494-495
amniotic fluid, and insulin, *74
and congenital anomalies, *417-418, 439, 441
and delivery method, 444
time, 443, 494
eclampsia, 442
erythrocyte volume, *416
fetal loss, *76, *332, 439-444, 494-495
and age of diabetes onset, 56, *253, 440-441
intra-uterine death, 439, 441, 443-444
fetal survival, *167, 442
and zinc insulin, *159
glycosuria, *160, *420
and prenatal care, *420
hyaline membrane, 443
formation after delivery, *75
hydramnios, 443-444
hyperglycemia, after glucagon, *249
interruption perinatal loss, 443-444
intra-uterine tension reduction, 443
management, *162, *167, *250, 439-444, 494-495
blood sugar, *71
hypertension, 441-442
melituria, *420
and multiparity, 440
and nephritis, *75
prediabetic state, *332, 355, *420, 446
pre-eclampsia, *167, 441-442
coma, 439
fructose intolerance, *331
and retinopathy, *336
detection of, *251
and stillbirths, 33-35, *331, 355-356, 443, 444, 446
and sulfonamides, 56
and tolbutamide, 58
toxemia, 442
- PREMATURITY**, and diabetic father, 34-35
- PROLACTIN**, *251
- PROTEIN**
breakdown, and adaptation syndrome, 410
and cataract formation, 23, 25
deficiency, and acinar changes, *419
in diabetic acidoketosis, *500
dietary, and fat transport, 202-208
in insulin-induced adiposity, 211
metabolism, 186-187
and growth hormone, *339
and ketonemia, *418
and liver dysfunction, *506-507
and tolbutamide, *504
and vascular disease, *249
serum fractions, electrophoretic studies, 46-51, 365
- and insulin antagonist, 436
insulin-like activity, 365-367
nephrotic alloxan diabetes, 141
and sulfonamides, 56
- PROTEINURIA**, 141
and adrenal hyperactivity, 9-14
and serum lipid fractions in retinopathy, 241
- PUBERTY**, in prediabetics, 29-31, 355
- PYELONEPHRITIS**, 471-472
necrotizing, 114-117
and renal function, 11-12
- PYRUVATE**
blood concentrations, 149
formation, *78
hepatic, after tolbutamide, 62
metabolism, 150, 176
and oxygen uptake after insulin, 217
- ## R
- RASTINON**. See Tolbutamide
- RESPIRATORY QUOTIENT**
and insulin, 89
and pancreatic extract, *163
after phenethylidiguamide, 88
pyruvate levels and tolbutamide, 62
and Synthalin, 89
- RESPIRATORY TRACT**
infections, 471-472
in diabetic pregnancy, 442
- RETINITIS**, 237, *505
proliferans, 48-49, 351
- RETINOPATHY**, *167
See also Kimmelstiel-Wilson syndrome and ACTH, *336
and adrenal cortical hyperfunction, *74
and adrenalectomy, 12-14, *422
total bilateral, *255
date of onset, *165, 252
and duration of disease, *76
and fat transport, 223
and hypophysectomy, 13, *253, *254
and micro-aneurysm, *255, *342
mucoproteins in blood and urine, *416
and nephropathy, *72
in pancreatic diabetes, *418
and plasma 17-hydroxycorticosteroids, 11
prior to glycosuria and hyperglycemia, 243
and serum fractions, 48-51, 241
therapy, *336
testosterone, *417
urinary steroids, 14
vascular responses, 50-51, *167, *242, *418, *422
and mucopolysaccharide metabolism, *342
- RUBELLA**, infection, 471-472
- RUBEOISIS IRIDIS DIABETICA**, *76
- ## S
- SATIETY**, and food drive, *250-251, *420
- SELYE'S ADAPTATION SYNDROME**, 410
- SEPTICEMIA**, 115

SERUM

- in acidosis, 194-195, 235, *334, 434, 437
- and biguanides, 470
- bilirubin, *75
- and carbutamide, *75, 288, 291, *335, *420, 436
- carotene, 200-201
- cholesterol, *75, 194-195, 239
 - and low-protein diet, 207-208
 - nephrotic alloxan diabetes, 141
 - and obesity, 240
 - time factor after feeding, 210
- creatinine, 9
- glucosamine, 240
- glucose, *163
 - See also Blood sugar
- and hyperglycemia, 241
 - after *Clostridium perfringens* toxin, *416
- insulin, 119-123
 - antagonist, 434, 437
 - antibodies after, *336
 - epinephrine, 272-277
 - inhibiting factor, *77-78, 434, 436-437
- lipids, 50, 64, 194-195, 199, 201, 204, 207-208, 239-241
- lipoproteins, 190, 207-208, 242-243
- after low-protein, low choline diet, 207-208
- phosphate, 2-3, 62, 290-291, *335, *502
- phosphorus, 470
- potassium, 288-291, 376-383
- proteins, 46-51, *75, 141, 365-367, 436
- sodium, 97, 376-383
- and sulfonyleurea, *75, *420
- triglycerides, 194-201
- in uremia, 376-383

SHOCK

- in diabetic ketosis, *502
- after hyaluronidase, *335
- hypoglycemic, *255
- and cortisone, *331
- and histotoxic cerebral anoxia, *159
- in manic psychosis, *249
- overdosage, *159
- and remission of narcotic addiction, *249

SILBER-PORTER METHOD, 9, 490-492

SKIN

- lesions, *72
- reactions to hypoglycemic agents, 55, *71, *331
- surface temperature studies, 384
- xanthoma, 239-240, *334

SOBOLEV, LEONID V., 245-246

SODIUM

- in alloxan diabetes, 141, *421
- bisulfite, in urine hydroxycorticoids, 491-492
- chloride, 380
 - and glucose tolerance, 382
- deficiency, in acidosis, 230-235, *505
- intracellular concentrations of, *509
- restriction, 442
 - in hydramnios, 494
- serum, 97, 376-383
- in uremia, 376-383
- urinary excretion, 141, *503

SOMATOTROPHIN, *251

SOMOGYI-NELSON TECHNIC, 456, 487

D-SORBITOL, *502

STEATORRHEA, 25, *507

STEROIDS

- adrenal cortical and glycosuria, 347
- synthesis and acetyl Co-A, *418
- treatment for hypoglycemic reactions, *340-341
- urinary, and sulfonyleurea, *342

STILLBIRTHS, 33-35, *331, 355-356, 443-444, 446

STRESS

- and adaptation syndrome, 410
- and diabetes, *166, 411-412
- and ductular cell granulation, 20

SUCCINIC ACID, *78, *161, 217

SUGAR. See Blood sugar; Glucose

SULFONAMIDES

- See also Sulfonyleurea
- glutaminoxalacetic transaminase, 56
- hypoglycemic, 53-54, *332, 445
 - in diabetic tuberculous, *507
 - primary and secondary action, 467
- in pregnancy, 56
- and serum alkaline phosphatase, 56
- side effects, *165

SULPHONYLYL-BUTYLCARBAMIDE. See Carbutamide

SULFONYLUREAS

- and adrenalectomy, 54
- beta cell response, *164-165
- and blood sugar, 1, 7, *71, *420
 - duration of lowering effect, 56-58, *508
 - versus postprandial fasting, 58
 - via stimulation of insulin secretion, *420
- and bromsulfalein retention, *75
- and carbohydrate metabolism, *73, 461
- in depancreatized, 56
- glycosuria, *508
- and hepatitis, *75
- in hyperglycemia, *508
- hypoglycemic action, 7, *71, *250, *255, 461, *508, *511
 - and cortisone, *253
 - insulinase-inhibition, *76, *77
 - and liver function, *75
 - and insulin, 54, *70, *164
 - and glutathione-induced degradation, *76-77
- in liverless dogs, *510
- mechanism of action, *71, *337, *341, *417, 461
 - review, *501
- and metabolism of liver, 62
- and pituitary-corticoadrenal system, *342
- screening for usage, 56-58
- serum concentration, *420
- Takata reaction, *75
- and thyroidal uptake of radioiodine, *165
- and tolbutamide, *164-165, *508

SUMNER'S METHOD, 398-401

SYMPATHOTONIA, *253

SYNTHALIN. See also Decamethylene, Biguanide

- alphacytotoxic action, *77
- and blood sugar, 89, *249
- hepatic and renal damage due to, *508
- and lactic acid, 89
- and respiratory quotient, 89

T

2254 RP, for diabetes in children, *507

TAKATA-ARA TEST, *75, *78

TES-TAPE SCREENING METHOD, *70, *331, 393-396, 398-401, *420, *423

TETRAETHYLAMMONIUM IODIDE, *163

THREONINE, 207, 210

THYMOL TEST, *78

THYROID GLAND

- absence and sulfonyleureas, 54
- and dehydroascorbic acid, *163
- and insulin metabolism, *158-159
- radioiodine uptake, *165
- weight after amyldiguanide, 89

THYROXINE

- and insulin uptake, *159
- and liver glycogen content, *158
- and sympathetic nervous system, *166
- and vitamin B₁₂, *417

TISSUE

- adipose, 211-220
 - epididymal pad of rat, *508
 - fatty acids, 191, 211-220, *423
 - and insulin, 211-220, 450-451
 - and oxygen consumption, 217
- glucose uptake, and hypoglycemic agents, 449-453
- in hyperadrenocorticism, 214-216

TOLBUTAMIDE

- and adrenal cortical stimulation, *160
- and alkaline phosphatase, 55
- on ambulatory basis, *334, *336, *421
- and antibiotics, 56
- and barbiturates, 56
- and biguanides, 475
- and blood sugar, 1, 3-7, 57-58, *77, *159, *331, *334, 358, 360-363, 388, 390, 409, *421-422, 456
- and carbutamide, 55, *70, *335, 475
- and cholesterol, *336, *421, *511
- contradictions to usage, 58
- in diabetes types, 58, *77, *160, *254, *508
 - alloxan, 388-391
 - congenital, *254
 - in juvenile, 58, *70, *255, *507, *509
- labile, 57, *333, *418, *419
- mild, *166
- untreated, 55
- and diguanides, 89
- dosage, *255
 - species differences, 54-55
- effectiveness, 58, *158-159, *249
- and epinephrine, 7
- and fatty acids, 6-7
- and glucose, 62, 267-270, 358, 363, *421-422, 449-453
- hepatic output, 4-7, 61, 89

SUBJECT INDEX 1958

oxidation, 89
threshold, 451-452
utilization, 267-270, *422, *442, *504
and glucose-6-phosphatase, 7
and glycogen, 61, 284, *511
liver and muscle, 5-6
and glycosuria, *332, *508
in handicapped, 58
history, 53
in hyperglycemia, 89, *504
hypoglycemic responses, 4-7, *75, 89, 150, *158, *160, *162, 190, *331-332, *336-337, 389-391, *422-423, 455, *510
inhibition of insulinase, *76-77
and insulin, 1-7, 54-58, *77, *164-165, 267-270, 284, *333, 391, *418-419, *422, *508
and lactic acid, 89
and leukopenia, 55, *70
and lipoplethoric, *75
and metabolism of rat liver and diaphragm, 283-286
in necrobiosis lipoidica diabetorum, *165
and overweight, *75, *332
and pentose metabolism, 148
and peripheral tissues, 6, 61, 62, 267-270, *422, *442, 449-453, *508
relapse after, 56
response, *158, 455-460, *503-504
and age, *75, *77, *334
second symposium, *164
and serum phosphate, *335
side effects of, 55, 56, *70, *72, *164, 458, *508
and sulfonamides, 56, *165
and sulfonvlureas, *75
and thyroidal uptake of radioiodine, *165
tolerance, *158
toxicity, 55, *77
and tranquilizers, 56

TRIGLYCERIDES
lymph, *422
in plasma chylomicra, *422
serum, 194-201
in early diabetic retinopathy, 241
hepatic response, 204
after low-methionine diet, 206

TRIIODOTHYRONINE, *159

TRIPHOSPHOPYRIDINE
and cholesterol synthesis, 186-187, 483
and hepatic ketogenesis, 178

TRYPSIN
inhibitor and zinc insulin, *421
and serum insulin antagonist, 436

TUBERCULOSIS
and diabetes, *70, *166, *331
carbutamide, *507

and tolbutamide, *342
tuberculin-hypoglycemia in, *251

U

U-2043. *See* Tolbutamide

UREA

formation, and phenethyldiguanide, 87
glucose tolerance test after, 379-382

UREMIA

and arteriosclerosis, 103
and glucose tolerance, 375-382
and serum protein fractions, 49

URINARY TRACT, infections, 117, *337, 442

URINE, excretions

acetone, 57
and insulin, 470
albumin test, 58
androsterone, 10-12
daily output, *338
dehydroisoandrosterone, 10-12
etiocolanolone, 10-12
17-hydroxycorticosteroid, 11, *78, 492
and ACTH, 9-14
and Orinase after corticotropin, *160
mucoproteins, *416
in nephropathy, 11
nitrogen, in nephrosis, 141, 144
and obstruction in necrotizing papillitis, 115, 117
11-oxysteroids, 410
pentoses, 148
phosphorus after fructose, *505
pregnancy and prenatal care, *420
protein loss, 144
renal glycosuria, *73
in retinopathy, 9-14, *336, *417
sodium, 141
sugar content, *161, *251
in cardiovascular disorders, *163
in differential diagnosis of diabetes, *159
and pancreatic extract, *163
paper chromatography, 36-37
after partial pancreatectomy, 136-139
and yeast, 293-297
tests, 36-37
Benedict's, 398-401
Clinistix, *75, *331, 398-401
in diabetes mass detection, 312-315
self-interpretation, 393
Sumner method, 399
Tes-Tape, 398-401
and tolbutamide, 57-58
of vitamin B₁₂, *336, *417

V

VASCULAR DISEASE. *See* Blood vessels, diseases

VITAMIN

A, and fat transport, 226
B₁₂, *336
in carbohydrate metabolism, *417, *502
and retinopathy, *417
D, 226

VON GRAEFE, Albrecht, 151

VON MÜLLER, Friedrich, 66-68

W

WALKER CARCINOSARCOMA, *510

WATERHOUSE-FRIDERICHSEN SYNDROME, 114-117

WEIGHT

See also Obesity
after ACTH, 215
birth, and diabetic father, 34-35
and blood cholesterol levels, *76
and diabetes mortality, 237
and diguanide therapy, 89-92
fat metabolism, 240
and glucose tolerance, 243, 350-354
of goldthioglucoase-obese, and temperature, *160
and insulin, 211, *509-510
and ketonuria, *419
of toad, *509-510
and tolbutamide, 56, *75, *166
in two-month-old Chinese diabetic, *71

X

XANTHOMA

diabeticorum, *72, *336-337
experimental, 438
ground substance changes in, 477
and serum hyperlipemia, *334
of skin, 239-240

XANTHURENIC ACID, *505

D-XYLOSE

blood clearance, 148
insulin-responsive, and tolbutamide, *250
and serum phosphorus, *502
urinary excretion, 37, 148

Y

YEASTS, in urine and saliva, 293-297

Z

Z-N-INSULINUM ORGANON, *78

ZOLLINGER ELLISON'S SYNDROME, *338

AUTHOR INDEX 1958

In this index are the names of authors of articles which have appeared in *DIABETES* and those whose articles have been abstracted in the *Journal* during 1958. Entries marked with an asterisk (*) indicate authors of material which appeared in the *ABSTRACTS* only. For subject index see page 1.

A

Abe, Teitaro, *251
Ackerman, R. F., 312-315, 398-402
Adlersberg, David, 236-241, 243
Ahler, J., 398-402
Akishina, N. I., *158
Alagna, G., *416
Albright, B. J., 490-492
Albrink, Margaret J., 194-199, 201
Alex, Morris, 98-106
Allan, J. C., *504
Allwood, M. J., *248-249
Altszuler, N., *341
Andersson, B., *72
Andrews, M. M., *253, *338
Ansell, G. B., *416
Antila, Viljo, *251
Antoniades, Harry N., *416
Aoyama, Shigeto, *331
Arai, Yoshiaki, *333, *503
Aschner, B. M., *416
Ashmore, James, 1-6
Asper, S. P., 38-44, *342, *423
Azérad, E., *500

B

Babbott, David, 33-35
Baggenstoss, Archie H., 308-311
Baglioni, Corrado, *503
Baird, C. W., *70
Baker, Roger Denio, *340
Balén, S. A., *158
Baron, D. N., *70
Barta, L., *70, *331, *500
Bastenie, P. A., *70, *159
Batts, Adrienne A., *249
Bauer, Heinz, *70
Bayne, Stephen, *331
Beach, Eliot F., 136-139
Bean, Janelle, 486-489
Bedo, M., *500
Beekman, Bruce E., *249
Beese, J., *507
Beigelman, Paul M., 365-367, *416
Bell, D. J., *416
Bell, E. T., *70-71, *158
Bell, George E., *503-504
Bellens, R., *159
Bendfeldt, E., *331
Bennett, Claude E., *249
Bennett, Leslie L., *249
Bennett, Warren A., *337
Berg, Max, *416
Bergemann, Till, *77
Bergen, Stanley S., *500
Bergstrand, A., *158
Berkman, James, *249
Bernsohn, Joseph, *501
Bertram, F., *331
Best, C. H., *510

Bethard, William F., *421
Bhattacharya, S. K., *163
Bibergeil, H., *417
Bicknell, Franklin, *331
Bierman, Edwin L., 189
Bing, Richard J., *500
Birnbaum, David, *500
Blair, J. L., *334
Blau, Seymour H., *417
Bloom, Arnold, *159, *504
Bloomfield, Arthur L., *500
Bludau, W., *420
Blumenthal, Herman T., 98-106
Bolinger, R. E., 272-277
Bonessa, C., *500
Bonting, Sjoerd L., *417
Boon, Wong Hock, *71
Bornstein, J., *70
Bosschieter, E., *341
Boucot, Katharine R., *331
Bouman, J., *161
Bradley, Robert F., 468-477
Bradley, T. R., *500-501
Bradshaw, Phoebe J., 136-139
Brennan, Arnold, *160
Britton, Barbara, *505
Broman, L., *333
Brown, F. R., Jr., *165
Brown, Harold, *78
Brown, Harvey E., Jr., *252
Brown, Meyer, *501
Bryson, William, *501
Bucht, H., *158
Burckhardt, K., *158
Burckhardt, W., *158
Burns, Robert P., 21-26
Burns, Thomas W., *417
Burt, Richard L., *249, *331
Burtness, H. L., 59-61
Burton, Stanley D., *158
Butterfield, John, 449-454
Butterfield, W. J. H., *71, *158
Byers, Sanford O., *158

C

Cahill, George F., Jr., 1-6
Caillouette, James C., *331
Cain, E. F., 59-61
Calton, F. M., *501
Camerini-Davalos, Rafael, *337, *502-503, *505-506, *508
Camp, J. L., *71
Campos, Paulo C., *249
Cantero, Antonio, *511
Cardeza, A. F., 368-374
Caren, Raymond, *249
Carrington, Elsie R., *332
Chaikoff, I. L., *78
Charnaya, P. M., *166
Chow, Bacon F., *417
Christensen, S., *501

Christophe, J., *159
Clamen, M., 140-145
Clarke, D. W., 283-287
Clowes, G. H. A., *162
Cohen, Aharon M., *158-159
Colbert, R. M., *501
Collins, John M., *501
Colwell, Arthur R., Sr., 53-59, *501
Colwell, John A., *501
Conard, V., *70, *159
Conn, Jerome W., 347-357
Constam, G. R., 36-37, *71, *159
Cook, James R., 298-307
Corbo, Lucille, *249
Cordonnier, James K., *166
Cornblath, Marvin, *501
Corvilain, J., *501, *511
Cotlar, Nathan, *249
Courville, Cyril B., *159
Craig, James W., 267-271
Croom, J. H., *159
Crowley, Mary F., *159, *504
Csaky, T. Z., *501
Cullimore, Owen S., 136-139
Cutforth, Robert H., *417

D

Dagenais, Yves M., *507-508
Daly, J. J., *71
Danowski, Thaddeus S., *501-502
Darwish, A. E., *502
Daughaday, William H., 230-235, *502
Davies, J., *71, *501
de Bodo, R. C., *341
DeBonis, C. S., *71-72
de Graeff, J., *72
De Groot, C. A., *159, *502
de Grouchy, J., *506
Dekaban, Anatole S., *417-418
Demanet, T. C., *70
Demanet, J. C., *159
DeMeutter, R., *70
De Meyer, R., *510
Deucher, F., *339-340
Deuil, Roger, *332
DeVaughn, N. H., *502
DeVenzani, F., *502
Dickey, Robert F., *72
Dickinson, Lewis, *249
Diengott, Daniel, *252
Dimsdale, Lewis J., *159
Dinda, Ruth E., *501
Ditzel, Jørn, *418, *502-503
Dobson, Harold L., *418, 482-489
Dodgen, Charles L., *503
Doenges, John P., *336, *421
Dohmen, H., *416
Dole, Vincent P., 189
Dolger, Henry, 53-59
Dollerup, E., *501

Dorian, Robert I., *420
 Dörner, M., *165-166
 Dreiling, David A., *503
 Drury, M. I., *159
 Duchateau, Norman, *421
 Duncan, Garfield G., 53-59, *332
 Duncan, L. J. P., *159, *418
 Dunlop, D. M., *159, *160
 Dyfverman, A., *333

E

Earle, A. Scott, 1-6
 Eiseman, B., *510
 Ellenberg, Max, *333
 Ellis, Stanley, *249
 Ellison, Edwin H., *342
 Ellison, R. J., *503
 Elrick, Harold, 129-131, *333, *503
 Emrich, Karl, *75
 Engel, Frank L., *418
 Engelhardt, Hugo T., *418
 Englert, Edwin, Jr., *78
 Engleson, Gunnar, *72
 Epstein, E., *504
 Erk, Vernon O., *165
 Essellier, A. F., *252-253

F

Fabrykant, Maximilian, *333, *418-419
 Fagerberg, Sven-Erik, *72, *160, *333, *419
 Fahlgren, H., *72
 Fasella, Paolo, *503
 Fernández, César, *160
 Field, James B., 433-438
 Fikry, M. Essam, *502
 Finkle, John, *501
 Fischer, O., *505
 Fisher, Peter, *160
 Flanagan, E. B., *250
 Flanagan, John F., *70
 Flink, Edmund B., *333
 Forbes, Gilbert B., *421
 Franckson, J. R. M., *70
 Franklin, Edward C., *334
 Frawley, Thomas F., *250
 Frazer, Samuel C., *334
 Freeman, A. G., *419
 Fregly, M. J., *160
 Frezal, J., *506
 Friedman, George Alexander, *250
 Friedmann, Bernice, 358-364
 Friskey, R. W., *165
 Fritz, Irving B., *419
 Froesch, E. R., *334
 Fry, I. Kelsey, *158, 449-454
 Fulton, Richard L., *503-504
 Furnivall, Mary, *334

G

Gablinger, S., *339-340
 Gabrilove, J. Lester, *160
 Gaddy, H. R., *339
 Garland, Hugh, *250
 Gastineau, Clifford F., *504
 Geld, H. v. d., 119-123, 272-277
 Gelin, A., *504
 Gellis, Sydney S., *75
 Gemzell, C. A., *421, *507
 Genes, S. G., *158, *166
 George, Robert A., *249
 German, J. L., 261-266
 Gerritzen, F., *72

Gerstenfeld, Shirley, *339
 Geyer, A., *509
 Ghata, J., *500
 Gilbert, C., *504
 Gilbert, Joseph T., *339
 Gillman, J., *504
 Ginsburg, Jean, *248-249
 Ginsburg, Silas J., 33-35
 Gitzelmann, R., *338-339
 Given, William P., *250
 Glenn, J. E., *501
 Goetz, Frederick C., 393-397
 Goldenberg, Sidney, 98-106
 Goldner, Martin G., *166-167
 Goodman, Edward H., Jr., 358-364
 Gordon, Edgar S., *250
 Gordon, Maria F., *419, *509-510
 Goto, Yoshio, 133-135
 Grabar, P., *336, *506
 Green, Robert C., Jr., 308-311
 Greene, James A., *418, 486-489
 Greenman, Lawrence, *501-502
 Griffiths, W. J., *337
 Grindle, L., *165
 Griscom, John H., 21-26
 Grodsky, G. M., *334
 Groen, J., 119-123, 272-277
 Gross, Milton, *420
 Grunberg, A., *334
 Guggenheim, Peggy Rose, 393-397
 Gumpel, Roy C., *334
 Günther, Otfried, *72-73
 Gutman, Aron, *160

H

Haarstad, Jens, *334
 Hackedorn, Howard M., *73, *504
 Hadley, William B., *418
 Haemmerli, U. Peter, *503
 Haessler, H. A., *421
 Hall, G. H., *504
 Hall, Mauri, *335
 Hallay, Leo I., *73
 Halmi, N. S., *504
 Hand, Leo V., *160
 Hardin, Robert C., *340
 Hardwick, C., *71, *158
 Hare, Robert L., *75
 Harr, Helmut O., *165
 Harris, Keith, *510
 Harrison, Charles W., *336, *421
 Hartroft, W. Stanley, 221-227
 Hashim, Sami A., 114-117
 Hass, A. C., *504
 Hasselblatt, A., *420
 Haunz, Edgar A., *73, *420
 Hausberger, Franz X., 211-220
 Hauser, T. E., *250
 Hawkes, J. H., 398-402
 Hay, K. M., *334
 Hayes, Daniel W., *161
 Heijkenskjöld, F., *73
 Heimsius, E., *505
 Helps, E. P. W., *73
 Hendon, James Robert, *250
 Henley, Elaine D., *255
 Hennes, Allen R., *510
 Hernberg, Carl A., *73-74
 Herold, A. A., *161
 Hertz, Roy, *506
 Hessel, Milton M., *74
 Hill, F. M., *338
 Hill, M. M., *74
 Hilton, James G., *500

Hirayama, Sizuo, *161
 Hirsch, B., *420
 Hirsch, Edwin F., *420
 Hlad, C. J., Jr., 129-131, *503, *510
 Hodgkinson, C. Paul, *167
 Hoenig, V., *505
 Hoenigová, J., *505
 Hoet, Joseph P., *74
 Hoffman, M. M., 140-145
 Holcomb, Blair, *75
 Hollifield, Guy, *250-251, *420
 Holling, H. Edward, *71, *158, 449-454
 Holman, Ralph T., *118, *146, *193
 Holten, Cai, *74, *251
 Holzel, A., *254
 Homan, J. D. H., *161
 House, E. L., *251
 Houssay, B. A., *251
 Hsia, David Yi-Yung, *75
 Huffman, E. R., *503
 Hug, G., *338-339
 Hugenholtz, M. J., *341
 Huggett, A. St. G., *161, *251
 Hughes, Joseph, *496-499
 Hunter, R. B., *341
 Hyde, Paul M., *255

I

Ikkos, Denis, *161, *421, *507
 Ippen, H., *254
 Irvine, R. E., *74

J

Jackson, W. P. U., *251, 446-448
 Jacobs, Erwin M., 493-494
 Jacobs, Gerson, 358-364
 Jaffe, Louis, *74
 Jahnke, K., *334-335
 James, George, *507
 Janowitz, Henry D., *503
 Jaumann, R., *335
 Jauregui, Raul Hernandez, *166-167
 Jeanneret, P., *252-253
 Jensen, S. Eskjaer, *335, *501
 Jersild, M., *74
 Jezequel, C., *507
 Jiménez, Díaz, C., *74-75
 John, Henry J., *505
 Johnson, Doris, *335
 Johnson, Einer W., Jr., *505
 Johnson, Morris B., *255
 Johnson, P. C., 490-492
 Joiner, C. L., *335
 Jones, Walter S., 439-445
 Julian, Nancy, *331

K

Kaartinen, Matti, *335
 Kalant, N., 140-145
 Kalstone, Bernard M., *505
 Kanter, G. S., *161-162
 Kaplan, P. M., *158
 Kapp, David F., *510
 Karasek, M. A., *505
 Kark, Robert M., *417
 Katsch, G., *162
 Kaufman, Robert E., *420-421
 Keltch, A. K., *162
 Kennedy, B. J., *255
 Kennedy, David J., *505
 Kennedy, J. E. K., 320-324
 Keup, W., *335
 Khanade, J. M., *509

Kigoshi, Shigeru, *251
 Kinsell, L. W., *165
 Kinzer, Charles William, *162
 Kirtley, W. R., 93-96
 Kitamoto, Osamu, *251
 Kleeberg, Julius, *335, *500
 Klein, R., *335-336
 Klimas, John E., Jr., 388-392
 Kloster, Johan, *77-78
 Knick, Bernhard, *75
 Knowles, Harvey C., Jr., 109-112
 Knox, Lawrence J., *336, *421
 Koenig, Robert P., *505
 Kohn, J., *75, *336
 Kolff, Willem J., *331
 Komrower, G. M., *254
 Konigsberg, I. R., *503
 Kotake, Yahito, *505
 Krah, M. E., *162
 Krall, Leo P., *336, 468-477, *505-506
 Kramer, Benjamin, *163
 Kramer, David W., 384-387
 Kronenberg, Bernard, *336
 Kulkoski, Bernard, *421
 Kuusisto, A. N., *251
 Kuwayti, Kamal, *75

L

Labhart, A., *334
 Lacy, Paul E., *71, 368-374
 Ladimer, Irving, *108, *229
 Lambert, Thomas H., *421
 Lamy, M., *506
 Lancaster, W. M., *506
 Landau, Bernard R., *506
 Landing, Benjamin H., *162
 Lang, S., *166
 Lapenna, Martheriga Silvestri, *336
 Lapresle, Cl., *336, *506
 Larsson, Yngve, *506
 Laskowski, M., *421
 Laskowski, M., Jr., *421
 Lawrence, R. D., *75
 Lazarus, Sydney S., 15-19, 125-127
 Leach, Robert B., *74
 Lee, C. T., Jr., *335
 Leevy, Carroll M., *506-507
 Leftin, Jehaudah H., *337
 Lehmann, Orla, *72
 Leites, S. M., *162-163
 Leopold, Irving H., 151-154
 Leschinskaja, I. S., *251-252
 Lestrade, H., *507
 Letchner, A., *507
 Levin, Ephraim Y., *501
 Levine, Herbert J., *506
 Levine, Rachmiel, 53-59, *419, *507, *510
 Levinson, Samuel A., *416
 Levitsky, Leon R., *77
 Lewin, J., *500
 Lewis, Edward C., II, *252
 Lewis, J. G., *75, *163
 Lewis, R. C., *164
 Lieberman, Jacob E., 261-266
 Lieberman, Seymour, 9-11
 Lips, J. B., *72
 Lipscomb, Harry S., *418, 486-489
 Lobeck, Charles C., *421
 Long, Earl E., *507
 Lorenzen, Robert F., *336
 Loustau-Chartez, Marc, *507
 Loveless, Mary H., 278-282
 Lowrie, William L., *167

Luft, Rolf, *161, *421, *507
 Lukens, F. D. W., *421
 Lundbaek, Knud, *74, *335, *421, *422
 Lundmark, C., *72
 Lurie, Arthur S., *336-337

Mc

McCandless, Esther L., *422
 McConahey, William M., *337
 McCullagh, E. Perry, 298-307
 McDonald, George, *422
 McGavack, Thomas H., *165
 McKendry, J. B. R., *75
 McKittrick, John B., *167

M

MacDonald, Mary K., *163
 Macdougall, A. I., *253, *338
 MacFarlane, A., *418
 Macgregor, A. C., *159
 Macho, L., *507
 Madison, Leonard L., *422, 455-461
 Magee, Kenneth R., *417-418
 Mahler, R. F., *341
 Maier, C., *337
 Mailman, Richard A., *507
 Man, Evelyn B., 194-201
 Marble, Alexander, *337, *508
 Marks, J., *335-336
 Marks, Leon J., *337
 Marquetti, Estela, *501
 Mars, C., *500
 Marshall, David, *503
 Marshall, N. B., *160
 Marston, Ellen, 462-467
 Martin, Donald B., *507-508
 Martin, T. Sterling, *75
 Martin, William J., *337
 Maske, H., *161
 Mateer, Frank M., *501-502
 Matthijsen, R., *161
 Mayer, Jean, *160, *252, *422
 Mayes, P. A., *252
 Mehnert, Brigitte, 293-297
 Mehnert, Hellmut, 293-297, *508
 Meiklejohn, A. P., *159
 Merriam, Joseph C., Jr., *163
 Meyer, John S., *508
 Middleton, J. E., *337
 Miech, R. P., *421
 Miller, Emery C., *337
 Miller, Max, 267-271
 Miller, R. D., *337
 Mills, Lewis C., *422
 Mirsky, I. Arthur, *252, *335-336, *508-509
 Mohnike, G., *252
 Moinat, Pierre, 462-467
 Möller, Bent, *335
 Möllerström, J., *337-338
 Molzahn, Valerie J., 267-271
 Monroe, Lee S., *421
 Moore, Charles, *78
 Morandi, L., *252-253
 Moretti, G., *509
 Morgans, M. E., *76
 Morpurgo, A., *500
 Morton, John V., *419, *510
 Mosca, Leonardo, *163, *253, *422-423
 Moss, James M., *509
 Muehrcke, Robert C., *417
 Munk, K., *161
 Munro, I. B., *75
 Muntwyler, Edward, *503

Murlin, John R., *163
 Murray, D., *75
 Murray, Ian, *506

N

Nabarro, J. D. N., *166
 Nace, P. F., *251
 Nakayama, Yutaka, 133-135
 Namin, Ernesto P., *249
 Nath, M. C., *509
 Neuberg, Hans W., 21-26
 Newcomb, Alvah L., *509
 Newton, John D., 375-383
 Nichols, Nancy, *509
 Nielsen, Kai, *421, *422
 Nielsen, Robert L., *255, *338
 Nikiforova, N. I., *253
 Nisell, Ove, *163
 Nixon, D. A., *161, *251
 Noach, E. L., *72
 Norton, William S., *500
 Novikov, A. T., *163

O

Oakley, Celia M., *70
 Oakley, Wilfrid, *338
 O'Connell, Maureen, *338
 Odell, William D., 87-90
 Olivecrona, H., *421, *507
 Olmsted, W. H., *423
 Olson, Robert E., 202-208
 Olwin, Thomas K., *333
 Oncley, John L., *416
 Oppé, T. E., *75
 Oppenheimer, H. E., *423
 Osterman, E., *335
 Otto, H., *331
 Oya, J. C. de, *74-75

P

Packer, Henry, 312-315, 398-402
 Page, Otto C., *75
 Paley, R. C., *166
 Palmer, Solon, Jr., *421
 Parson, William, *250-251, *420
 Paton, A., *248-249
 Patová, V., *505
 Paul, Jerome T., *509
 Pavlov, G. T., *162-163
 Peanasky, R. J., *421
 Peck, Franklin B., Jr., 93-96
 Peck, Franklin B., Sr., 93-96
 Pelphrey, Charles F., *339
 Pence, Virginia, *423
 Penhos, J. C., *251
 Pennell, Robert B., *416
 Perilstein, Paul K., 384-387
 Perisutti, Gladys, *252
 Perkoff, Gerald T., 375-383
 Petrova, A. N., *163-164
 Pirart, J., *504
 Planta, F. von, *338
 Plattner, H. C., *253
 Pletscher, A., *76-77
 Pollak, Victor E., *417
 Pomeranze, Julius, *253
 Portnoy, Harold D., *508
 Post, Richard H., 27-31, *416
 Pote, William W. H., Jr., *338
 Powell, M. E. A., *417
 Prader, A., *334
 Presley, Sophie J., *509
 Presthus, Jan, *255

AUTHOR INDEX 1958

Priestley, James T., *254
 Prout, T. E., 38-44, *342, *423
 Pryce, I. G., *338

R

Rachiele, F. J., 129-131
 Radkina, B. S., *166
 Rae, M. V., *164
 Rafaelsen, O. J., *335, *422
 Ralli, Elaine P., *75-76, *334
 Ranke, Eugene J., *253
 Rapela, C. E., *509
 Reardon, Helen S., *332
 Reichard, George, 358-364
 Reid, James, *253, *338
 Renold, Albert E., *507-508
 Richardson, J. C., *338
 Riedel, Robert H., *423
 Rifkin, Harold, 9-11
 Ritchie, Susan, *423
 Robbins, Edward, *158
 Roberts, Thomas N., 189
 Robillard, Rosario, *76
 Robinson, R. M., *510
 Robson, J. S., *418
 Robson, W., *252
 Rodriguez-Inigo, J., *510
 Rodríguez Miñón, J. L., *74-75
 Rogers, Terence A., *510
 Root, Howard F., *167
 Root, Mary A., 53-59
 Rosenthal, F. D., *76
 Rossi, E., *338-339
 Rossmeisl, Elsie C., *337
 Rowell, N. R., *74
 Rubin, Alan, 33-35
 Rudomin, Z. P., *339
 Runge, Thomas M., *339
 Russell, Jane A., *339
 Russell, Keith P., *331

S

Sagle, Lloyd Alexander, *75
 Saifer, Abraham, *339
 Salem, Edward S., *74
 Salter, J. M., *510
 Sandberg, L., *73
 Sargeant, Lynn, *418
 Saucier, Robert, *76
 Schamaun, M., *339-340
 Schauble, Muriel K., *340
 Schepers, G. W., *76
 Scherer, J., *253
 Schertenleib, Fredy, 46-51
 Schimek, Robert A., *253-254
 Scholz, Donald A., *254
 Schreus, H. Th., *254
 Schuck, O., *505
 Schwamm, H. A., *338-339
 Schwarz, V., *254
 Schwarz-Speck, M., *158
 Scohy, L., *501, *511
 Scott, G. W., 38-44, *342, *423
 Searle, Gordon W., 388-392
 Seegers, Winnifred, *165
 Segaloff, A., *78
 Seglenieks, Z., *501
 Sellman, Jack C., 375-383
 Senman, H., 283-287
 Sexton, Robert F., *420
 Shallenberger, Paul L., *510
 Sharma, Raghunath Ghandra, *76
 Shatton, Jennie, *419

Shaw, Helen M., *165
 Sheldon, Walter H., *70
 Shirey, Earl K., 298-307
 Shreeve, Walton W., *510
 Shuman, Charles R., *332
 Siliprandi, Noris, *503
 Silver, A. A., *165
 Simon, G., *70
 Singh, Gurbachan, *76
 Singh, Inder, *254
 Singh, Man Mohan, *76
 Siperstein, Marvin D., 181-187
 Skensved, Ole, *254
 Skillman, Thomas G., 109-112
 Skouby, Arne P., *165
 Slater, J. D. H., *166
 Smellie, J. M., *423
 Sobel, G. W., *510
 Sodhi, Harbajan S., *254
 Soffer, Louis J., *160
 Sollberger, A., *337-338
 Solomon, Samuel, 9-11
 Sommers, Sheldon C., *163
 Sorce, Richard C., *510
 Spellen, Bruce, *165
 Spencer, A. G., *76
 Spirtos, B. N., *504
 Spittel, John A., Jr., *337
 Splitter, S., *165
 Sprague, Randall G., 308-311
 Spratt, Irving L., *340
 Srinivasan, M., *254-255
 Stadie, William C., 173-178, *340
 Staeffen, J., *509
 Staffeldt, Ingrid, *74
 Stahl, J., *165-166
 Statti, Louis W., *76
 Staub, A., *503
 Steele, R., *341
 Stephens, John W., *75
 Stephens, P. J., *75, *163
 Sterzing, Ludwig, *340
 Stetten, DeWitt, Jr., *255
 Stevenson, A. E. M., *76
 Stone, Howard H., *417
 Stowers, J. M., *341
 Strässlé, R., *76-77
 Strautzenberg, S. E., *77
 Strisower, E. H., *78
 Stuber, H. W., *334
 Sugar, Samuel J. N., *77
 Sukhovi, F. I., *158
 Sullivan, John F., *510-511
 Surtshin, A., *166
 Swanson, Heidi E., *338
 Szücs, S., 288-292

T

Tagnon, R., *501, *511
 Tanner, Donald C., *338
 Tassoni, J. P., *251
 Tepperman, Helen M., 478-485
 Tepperman, Jav., 478-485
 Thannhauser, S. J., 66
 Thiel, A., *77
 Thomas, Clayton L., 375-383
 Thomas, Constance P. F., *341
 Thorn, George W., *416
 Thosteson, George C., *77
 Tiszai, A., 288-292
 Tolstoi, Edward, *250
 Törnblom, Nils, *341
 Traisman, Howard S., *509
 Trytten, M. H., *14

Tucker, H. St. George, *162
 Tuller, Elizabeth F., 46-51
 Tulloch, John A., 316-319, *341
 Tunbridge, R. E., *166
 Turano, Carlo, *503
 Turner, Oliver E., *511
 Tyberghein, Jean M., *255, *511
 Tyler, Frank H., 375-383

U

Unger, Roger H., *422, 455-461

V

Valk, L. E. M., *72
 van Beek, Cornelia, 245-248, 413-414
 Van der Hoeven, L., *341
 Van der Sar, A., *341
 van Wijhe, M., *72
 Vassella, F., *338-339
 Vasseur, Bernard, *507
 Veller, N. S., *166
 Venkatesan, T. V., *341
 Vitale, Joseph J., *252, *422
 Volk, Bruno W., 15-19, 125-127
 Volk, David, *255
 Voll, Artur, *77-78
 Vongries, Alexander G., *334

W

Waddell, William R., *511
 Walker, G., *166
 Walker, Joan B., *166
 Wall, J. S., *341
 Wallach, Stanley, *78
 Wallbank, W. L., *166
 Waugh, Douglas, *423
 Weaver, J. A., 38-44, *342, *423
 Weber, George, *511
 Weber, J. F., *159, *502
 Weigand, Franklin A., *501-502
 Weinges, K. F., *78
 Weinhouse, Sidney, 358-364
 Weinman, E. O., *78
 Weisenfeld, Shirley, *166-167
 Weiss, Daniel M., *337
 Weiss, E. B., *503
 Weiss, T. E., *78
 Weissman, Milton, *334
 Wells, Benjamin B., *167
 Wells, Ronald, *342, *511
 Wendland, John P., *167
 Wenger, Verena, *342
 West, Kelly M., 490-492
 Westlake, E. K., *166
 Wheelock, Frank C., Jr., *167
 Whipple, N., *503
 White, Priscilla, 27-31, 468-477
 Whitehouse, Fred W., *167
 Whitney, J. E., *167
 Whitstone, William E., *510
 Wick, Arne N., *505
 Widner, R. R., *504
 Willebrands, A. F., 119-123, 272-277
 Williams, Edward F., Jr., 398-402
 Williams, Robert H., 87-90, *255, *338, *511
 Williams, Roger D., *342
 Wilson, Rodman, 109-112
 Wilson, W. P., *503
 Wise, George N., *342
 Witten, Thomas A., *333
 Wolf, H. P., *334

AUTHOR INDEX 1958

Wolfe, Frederick, *255
Wolff, Frederick W., *159
Wolff, Herman J., *255
Woodward, Hiram, Jr., 267-271
Woolf, N., *251, 446-448
Woolner, Lewis B., *254
Wright, J. T., *255
Wright, Peter H., *423
Wulff, B. L., 490-492

Y

Yagi, Tsutomu, 133-135
Yakusheva, T. S., *162-163
Yam, Tan Bock, *342, *511
Yankelevich, D. E., *255
Young, F. C., *167

Z

Zeligman, Israel, *165
Zetterqvist, Per, *72
Ziegler, Dewey K., *255
Ziffer, Herman, *160
Zilversmit, D. B., *422, *423
Zottu, S., 1-6

Book Reviewers

Louis K. Alpert, M.D., Washington, D.C.	Philip M. LeCompte, M.D., Boston
Deaconess Maude Behrman, Atlantic City	Louis Leiter, M.D., New York
Mary Dumm, Ph.D., New York	Erwin H. Mosbach, Ph.D., New York
W. Stanley Hartroft, M.D., Ph.D., St. Louis	Henry E. Oppenheimer, M.D., St. Louis
Norman Jolliffe, M.D., New York	Herbert Pollack, M.D., New York
Abraham H. Kantrow, M.D., New York	Edward Tolstoi, M.D., New York
Harvey C. Knowles, Jr., M.D., Cincinnati	Abraham White, M.D., New York
Charles F. Wilkinson, Jr., M.D., New York	
